707

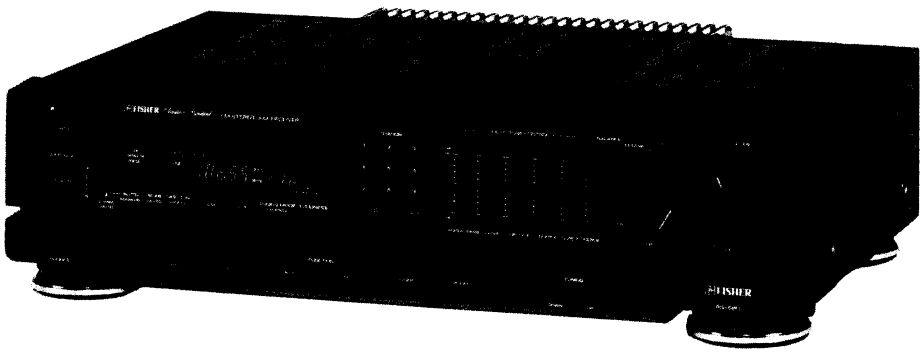
SERVICE MANUAL

FISHER

RS-560

(EUROPE)

AM/FM Stereo Receiver



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REFERENCE No. WM-57 06

707

SPECIFICATIONS

POWER AMPLIFIER SECTION

Minimum RMS sine wave power per channel within the stated bandwidth at no more than the stated distortion and with an 8Ω load (DIN) 40Watts
Power Bandwidth ..... 20Hz ~ 20kHz
Total Harmonic Distortion 0.07%
I.M.Distortion 0.07%
Speaker Damping ..... >20

PREAMPLIFIER SECTION

Frequency Response
- Phono (RIAA) ..... ±1dB
- AUX (20Hz ~ 20kHz) ..... ±1dB

Input Sensitivity and Impedance
- Phono 2.5mV/47kΩ
- Tape Monitor 1,2 ..... 150mV/47kΩ
- AUX/CD 150mV/47kΩ

Phono: Maximum Input Capability 150mV
Graphic Equalizer
- 63Hz ..... ±10dB
- 250Hz ..... ±10dB
- 1kHz ..... ±10dB
- 4kHz ..... ±10dB
- 16kHz ..... ±10dB

Loudness Contour (100Hz/10kHz) ..... +8dB/+4dB
Hum and Noise (DIN)
- Phono 70dB
- Tape Monitor 1,2 ..... 90dB
- AUX/CD 90dB

FM SECTION

26dB Quieting Sensitivity
- Monaural 1.0μV/0dB

46dB Quieting Sensitivity
- Monaural 5.0μV/14dB

Signal-to-Noise Ratio
- Monaural 70dB
- Stereo 65dB

Capture Ratio 1.5dB
Alternate Channel Selectivity(±300kHz) 50dB
Image Response Ratio ..... >118dB
Spurious Response Ratio 80dB
IF Response Ratio ..... >118dB
AM Suppression Ratio 60dB
Total Harmonic Distortion at 50dB Quieting
- Monaural 0.1%
- Stereo 0.1%

Total Harmonic Distortion at 65dBf
- Monaural (100Hz/1kHz/6kHz) 0.3/0.3/0.4%
- Stereo (100Hz/1kHz/6kHz) 0.4/0.4/0.5%

Stereo Separation
- (100Hz/1kHz/10kHz) 40/40/30dB

Sub-Carrier Rejection (19kHz/38kHz) 30/50dB
Audio Frequency Response
- (20Hz ~ 15kHz) ..... ±3.0dB

AM SECTION

Usable Sensitivity 800μV/m
Selectivity 28dB
Signal-to-Noise Ratio 55dB
Image Response Ratio 38dB
IF Response Ratio 60dB

GENERAL

Timer: Power off delay ..... ≧90 minutes
Selectable, 10-minute steps
Power Requirements ..... AC 230V
(50/60Hz) 250Watts
AC Outlet (Switched) 2
Dimensions (WxHxD) ..... 440 x 115 x 350mm
Weight (Approximate) 5.9kg

– Specifications and design are subject to change without notice. –

CAUTION ON RF ADJUSTMENT

This model uses a microprocessor for memory preset control for the various bands.
This function has been used to preset frequency points for the different bands to permit adjustment and make it possible to check the function of the microprocessor. To use this supplemental function, Press and hold down the TUNER Function button for approximately 5 seconds so that the frequency points show in the following table before beginning adjustment. The following table shows the initially preset frequencies.

	Station Memory Frequency Points									
Key No.	**01**	**02**	**03**	**04**	**05**	**06**	**07**	**08**	**09**	**10**
Frequency	87.5MHz	108MHz	88MHz	98MHz	522kHz	1611kHz	603kHz	1404kHz	999kHz	87.5MHz

AM TUNER ALIGNMENT

AM ALIGNMENT – Band Selector switch to AM position.
Maintain generator output as low as possible for suitable indication.

Note: Perform this alignment after FM Tuner Alignment.

ITEM	GENERATOR	DIAL SETTING	INDICATOR	PROCEDURE
1. AM IF ALIGNMENT	Connect 450kHz Radio IF Genescope output to AM ANT and ground. Adjust output level to 70dBμV.	Position of non-interference Minimum Frequency.	Connect Radio IF Genescope input to TP107 and TP108.	Adjust AM IFT (T106) for maximum gain and best symmetry. Keep signal low enough for noise on response.
2. AM RF FREQUENCY COVER ALIGNMENT (522kHz)	Do not connect generator.	Set Preset STATION button to "05" position. Set to 522kHz.	Connect DC Voltmeter to TP105 and ground lead to chassis.	Adjust AM OSC Coil (T105) until DC Voltmeter reads 0.8V ~ 1.3V.
3. (1611kHz)	Same as above.	Change Preset STATION button to "06" position. Set to 1611kHz.	Same as above.	Check DC Voltmeter for Indication 7.0V ~ 9.0V.
Note: Repeat the adjustments in Items 2 and 3. Then, confirm that each voltage becomes 1.0V to 8.0V at receiving frequency of 522kHz to 1611kHz. **(See Table 1)**				
4. AM RF TRACKING ALIGNMENT (603kHz)	Connect Standard Loop Antenna to output terminal of AM RF Signal Generator. Place Loop Antenna 60cm away from Loop Antenna (Unit). Generator Setting to 603kHz or 1404kHz. Modulate with 400Hz (30 % modulation).	Set Preset STATION button to "07" position. Set to 603kHz.	Connect AC VTVM and Oscilloscope to Tape REC OUT Terminals.	Adjust AM Antenna Coil (T102) for maximum gain output.
5. (1404kHz)		Change Preset STATION button to "08" position. Set to 1404kHz.	Same as above.	Adjust AM Antenna Trimmer (TC103) for maximum gain output.
Note: Repeat the adjustments in Items 4 and 5. Then, confirm there is no tracking error.				
6. AM AUTO STOP SENSITIVITY ADJUSTMENT	Change generator setting to 999kHz and output level to 60dBμV/m.	Set Preset STATION button to "09" position. Set to 999kHz.	Front Panel TUNED Indicator Display.	Adjust VR102 until the TUNED Indicator partly light up.

Use a screwdriver with plastic grip for all adjustments.

AM Frequency Cover Range
Tuning Voltage Value at TP105
(Table 1)

	522kHz	1611kHz
Minimum	0.8V	7.0V
Typical	1.0V	8.0V
Maximum	1.3V	9.0V

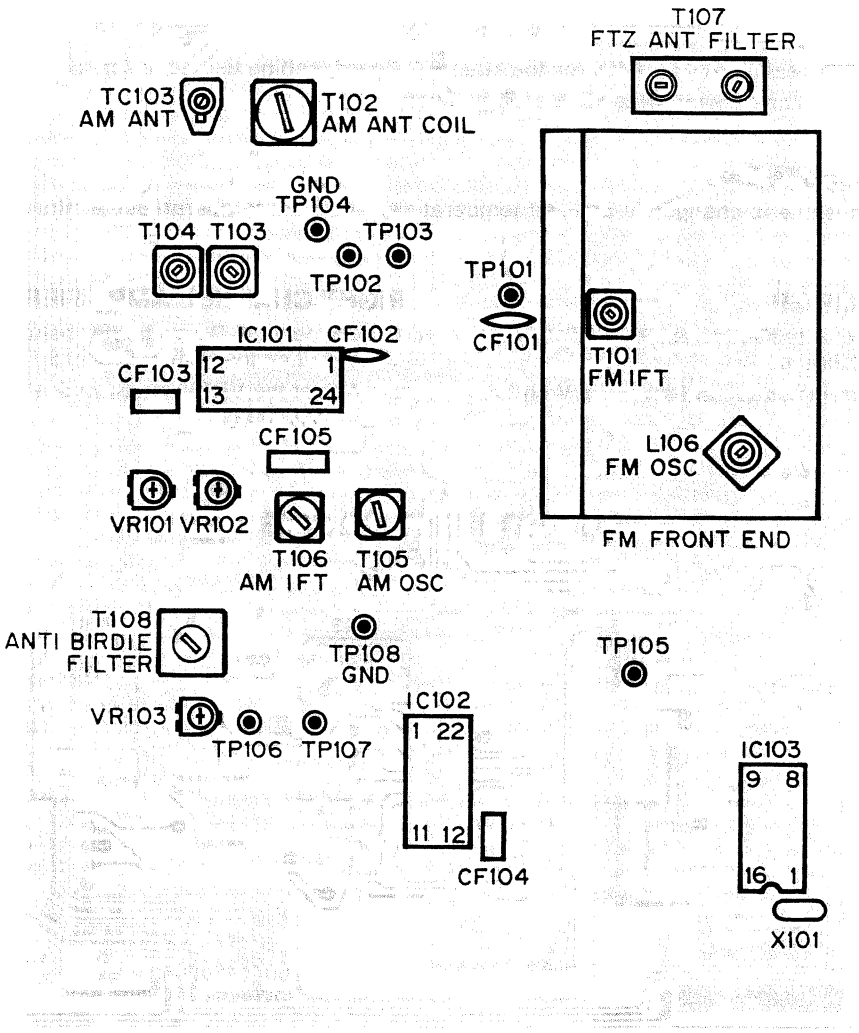
FM TUNER ALIGNMENT

FM ALIGNMENT – Band Selector switch to FM/ST(MUTE) position.
Note : It is almost unnecessary to adjust coil in Front End as perfectly adjusted

ITEM	GENERATOR	DIAL SETTING	INDICATOR	PROCEDURE
1. FM IF S-CURVE ALIGNMENT	Connect 10.7MHz Radio IF Genescope output to TP101 and ground lead to chassis. Use 5pF capacitor in series with generator output lead.	Position of non-interference Minimum Frequency.	Connect Radio IF Genescope input to TP106 and ground lead to chassis.	Adjust FM DET 1 Coil (T103) and FM DET 2 (T104) so that S-wave from becomes symmetrical.
2. DETECTOR ADJUSTMENT (MINIMUM T.H.D.)	Connect FM RF signal generator through FM Dummy Antenna to FM Antenna terminals. Set generator to 98MHz ±2kHz. Modulate with 1kHz to provide 40kHz deviation. Setting generator with attenuator output level for 60dBμV.	Set MODE switch to FM MONO position and Preset STATION button to "04" posion. Set to 98MHz.	Connect DC Voltmeter across TP102 and TP103.	Adjust FM DET 1 Coil (T104) until DC Voltmeter reads 0V ±50mV.
			Connect Harmonic Distortion Analyzer to REC OUT.	Adjust FM DET 2 Coil (T103) for minimum gain and best linearity.
Note: Repeat Step 1 (FM DET 1 Coil T104) and 2 (FM DET 2 Coil T103) until optimum alignment is reached.				
3. FM STEREO SIGNAL SEPARATION CONTROL	Connect FM Stereo SG to FM Antenna terminals. Set generator output level to 60dBμV at 98MHz stereo signal (1kHz Main-40kHz, pilot-6.75kHz) from LEFT channel.	Same as above Set Mode switch to ST(MUTE) position.	Connect AC VTVM and Oscilloscope to (Right channel) REC OUT.	Adjust VR103 for minimum output.
	Same as above for RIGHT channel.		Connect AC VTVM and Oscilloscope to (Left channel) REC OUT.	
4. FM MUTING AUTO STOP SENSITIVITY ADJUSTMENT	Set generator to 98MHz. Adjust attenuator output level to 14dBμV.	Same as above.	Front panel TUNED Indicator Display.	Set Mode Switch to ST(MUTE) Adjust VR101 until the TUNED Indicator partly light up.
Note: Decrease the output level of ATT and confirm that the wave form disappears. Increase the output level of ATT again and confirm that the input level meets the specifications sufficiently when the wave form has appeared.				

Use a screwdriver with plastic grip for all adjustments.

AM/FM TUNER ADJUSTMENT POINTS
(TOP VIEW)



POWER AMPLIFIER ADJUSTMENT

BEFORE ADJUSTMENT

Unplug the AC power cord and set the front panel controls as follows:

- Power switch to OFF position.
- Set the SPEAKERS switch to the OFF position.
- Turn the MASTER VOLUME Control to minimum.
- IDLING CURRENT ADJUSTMENT VR105/VR106 (on the Main P.C.Board) setting to mechanical center position.
- Connect the AC power cord and Power switch to the ON position.

IDLING CURRENT ADJUSTMENT

This adjustment is very sensitive to changes in ambient temperature. Allow set to operate for 2 minutes before attempting this alignment.

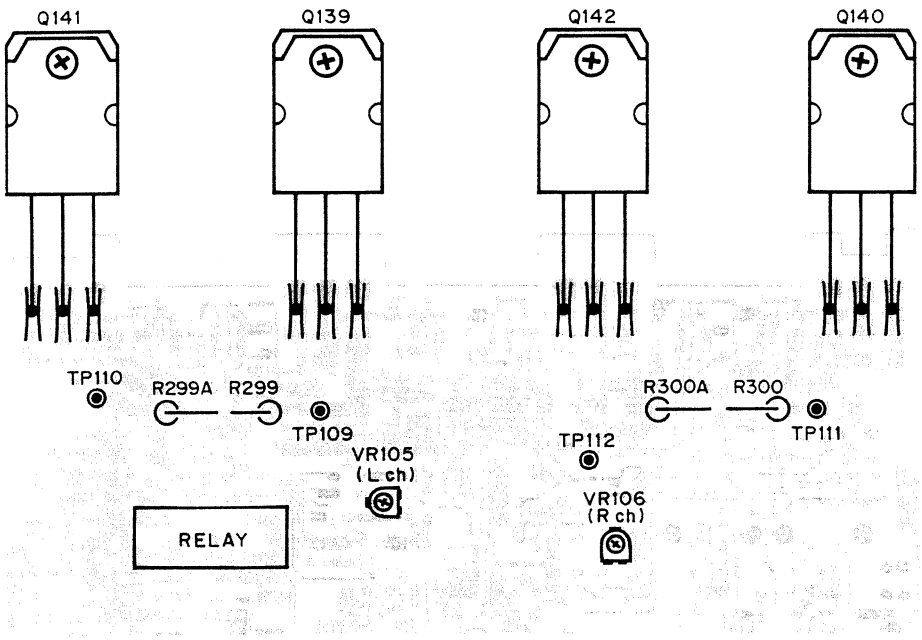
LEFT CHANNEL AMPLIFIER

1. Connect the DC Voltmeter between Test Point TP109 and TP110 on the Main P.C.Board.
2. Adjust the VR105 for an indication of 3mV ~ 7mV on the DC Voltmeter.

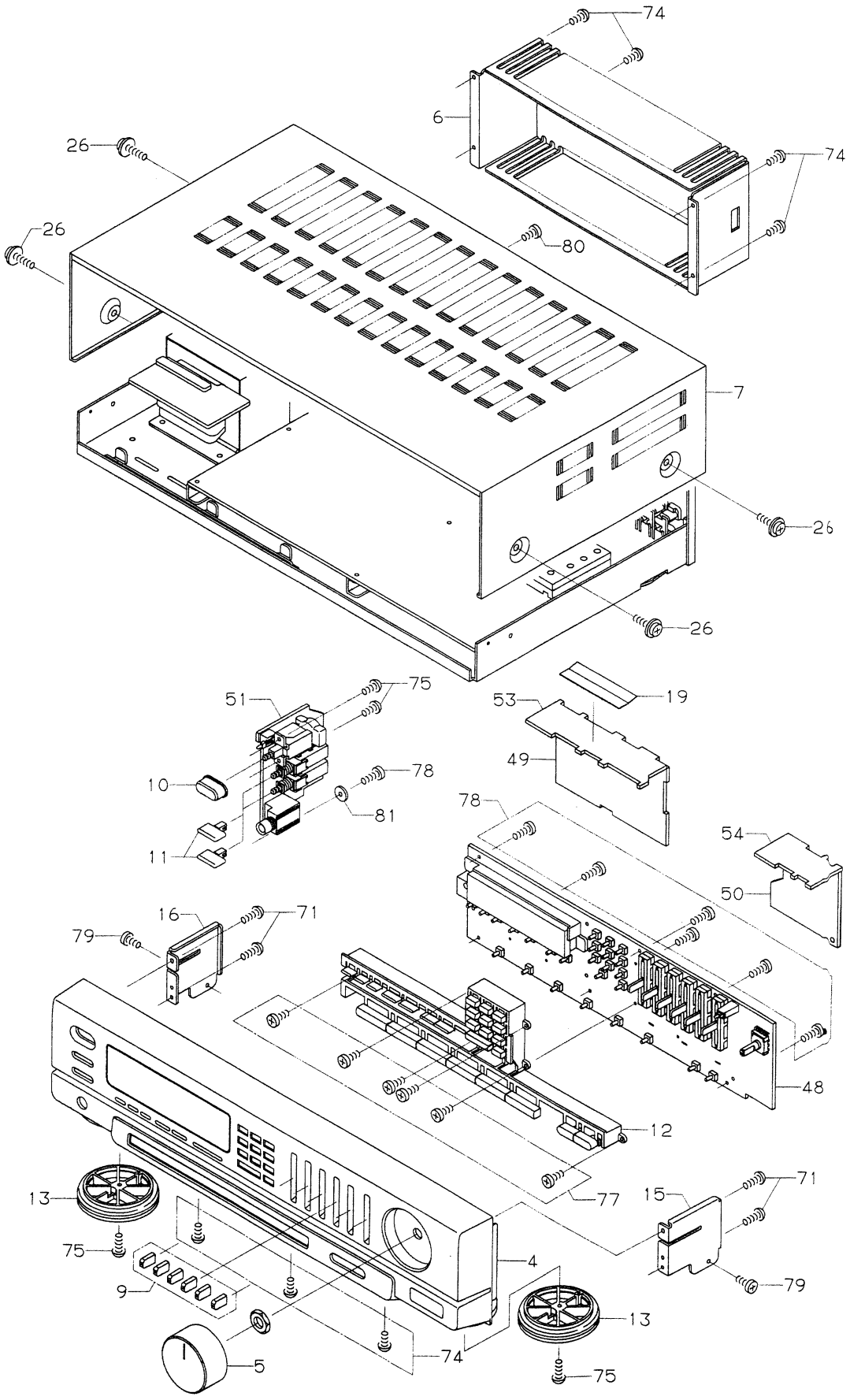
RIGHT CHANNEL AMPLIFIER

1. Connect the DC Voltmeter between Test point TP111 and TP112 on the Main P.C.Board.
2. Adjust the VR106 for an indication of 3mV ~ 7mV on the DC Voltmeter.

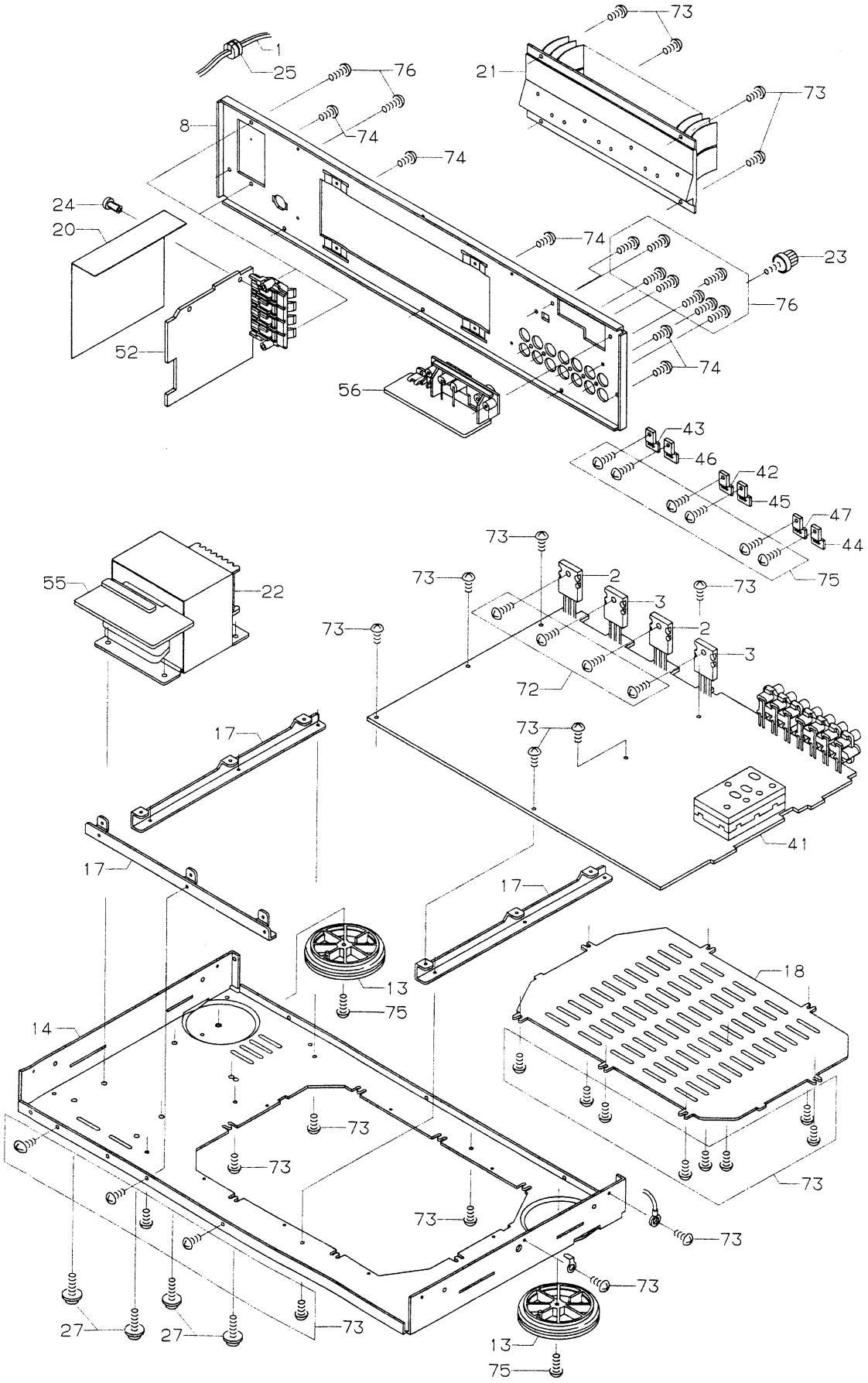
ADJUSTMENT POINTS
(TOP VIEW)



CABINET & CHASSIS EXPLODED VIEW (1)



CABINET & CHASSIS EXPLODED VIEW (2)



CABINET & CHASSIS PART LIST

Ref. No.	Part No.	Description	Q'ty
PACKAGE			
	620 212 2090	Inner Carton	1
	620 204 7966	Pad,Right	1
	620 204 7980	Pad,Left	1
	620 210 6434	Pad,Plain	1
	620 059 6596	Patching Sheet	1
	620 148 8012	Sheet Polyethylene	1
	620 152 7452	Serial No. Sheet	2
ACCESSORIES			
	620 212 2137	Assy,Poly Cover	1
	620 209 4243	Loop Antenna,LA-400	1
	620 212 2144	Instruction Manual	1
	620 038 1673	FM Antenna Assy	1
	620 057 8783	Bag Fan	1
	620 062 0543	Serial No. Sheet	1
	620 113 5312	Stand Loop Antenna	1
or	620 113 5305	Stand Antenna	1
	620 152 2624	Certificate Card	1
	620 212 2168	Label,Barcode	1
CABINET			
	620 022 3492	Terminal Lug	1
	620 050 2887	Cramp Wire	1
	620 125 8424	Wire Band	9
	620 152 7452	Serial No. Sheet	1
1	⚠ 620 023 7550	Power Cord	1
2	405 080 7602	TR 2SA1264N-O [Q141]	1
or	405 080 7701	TR 2SA1264N-R [Q141]	1
2	405 080 7602	TR 2SA1264N-O [Q142]	1
or	405 080 7701	TR 2SA1264N-R [Q142]	1
3	405 080 7800	TR 2SC3181N-O [Q139]	1
or	405 080 7909	TR 2SC3181N-R [Q139]	1
3	405 080 7800	TR 2SC3181N-O [Q140]	1
or	405 080 7909	TR 2SC3181N-R [Q140]	1
4	620 212 2069	Assy,Cabinet	1
5	620 204 9359	Assy,Knob,Rotary	1
6	620 212 6685	Cover,Heat Sink	1
7	620 204 8062	Cover	1
8	620 209 4106	Panel,Rear	1
9	620 204 3340	Knob,Slide	6
10	620 198 0622	Button,Power	1
11	620 198 0752	Button,Push	2
12	620 209 4274	Button,Function	1
13	620 198 6969	Assy,Foot	4
14	620 204 5795	Chassis	1
15	620 210 7141	Bracket-M,Right	1
16	620 210 7158	Bracket-M,Left	1
17	620 204 5764	Mount-M,Chassis	3
18	620 204 5788	Plate,Bottom	1
19	620 208 6224	Insulator	1
20	620 209 8784	Insulator	1
21	620 209 4076	Heat Sink	1
22	⚠ 620 208 8471	Power Trans,SEV 80VA	1
23	620 051 2152	Screw Ground	1
24	620 191 2746	Rivet 3.5	1
25	620 053 2136	Bushing (Power Cord)	1
26	620 123 0284	SCR TPG BIN +M4.0X8	4
27	620 123 0833	SCR Bind TAP-B +M4X10	4
41	620 209 1914	Assy,PCB,Main	1
42	620 211 2954	Assy,PCB,Transistor L,P	1
43	620 211 2961	Assy,PCB,Transistor L,M	1
44	620 211 2978	Assy,PCB,Transistor R,P	1
45	620 211 2985	Assy,PCB,Transistor R,M	1
46	620 211 2992	Assy,PCB,Bias Left	1
47	620 211 3005	Assy,PCB,Bias Right	1
48	620 209 1082	Assy,PCB,Control	1
49	620 209 1099	Assy,PCB,Micom	1
50	620 209 1105	Assy,PCB,Graphic Equalize	1
51	620 209 1112	Assy,PCB,Power Switch	1
52	620 209 1129	Assy,PCB,Speaker Terminal	1
53	620 209 1136	Assy,PCB,Micom Jumper	1
54	620 209 1143	Assy,PCB,Volume Jumper	1
55	620 209 1150	Assy,PCB,Fuse	1
56	620 209 1167	Assy,PCB,Antenna Terminal	1
71	411 020 5706	SCR S-TPG BRZ 2.6X8	4
72	411 020 5904	SCR S-TPG BRZ 3X10	4
73	411 020 7700	SCR S-TPG BRZ 3X6	28
74	411 099 9704	SCR S-TPG BRZ 3X6	12
75	411 020 8004	SCR S-TPG BRZ 3X8	12
76	411 099 9803	SCR S-TPG BRZ 3X8	10
77	411 021 2704	SCR S-TPG BIN 2.6X6	6
78	411 021 3107	SCR S-TPG BIN 2.6X8	7
79	411 021 5705	SCR S-TPG BIN 3X6	2
80	411 021 5903	SCR S-TPG BIN 3X6	1
81	411 092 3303	WASHER Z 3X12X1	1

NOTES:

1. Parts order must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and resistors must be multiple of 10 pcs.

PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol ⚠ in the parts list and the schematic diagram designate components in which safety can be of special significance. When replacing a component identified with ⚠, use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

P.C.BOARD PARTS LIST

Ref. No.	Part No.	Description	Q'ty
ASSY,PCB,MAIN			
41	620 209 1914	Assy,PCB,Main	1
	620 191 8632	FM Frontend 4EU AGC	1

(Component parts used in Front End are not serviceable and available.)

	620 021 6814	Pin 1P	12
	620 201 6146	Jack,RCA PIN,2P,WH/RE	1
	620 201 6160	Jack,RCA PIN,6P,WH/RE	2
	620 200 6109	Relay,2P-1T 24VDC	1
	620 053 9241	Plate Heat Sink	1
	620 118 1630	Plate Shield	1
	620 186 7275	Plate Earth	1
	620 190 0521	Cover Shield	1
	620 189 5872	Plate Sever	1
CF101	620 014 5664	Ceramic Filter	1
CF102	620 014 5664	Ceramic Filter	1
CF103	620 014 5879	Ceramic Filter 450kHz	1
CF104	620 014 6319	Ceramic OSC CSB456F11	1
CF105	620 026 6741	Mechanical Filter	1
CN101	620 204 9304	Connector-P,9115B-11,11P	1
CN102	620 204 9304	Connector-P,9115B-11,11P	1
CN103	620 204 9304	Connector-P,9115B-11,11P	1
CN105	620 020 5825	Socket Jumper 8P	1
CN106	620 020 5825	Socket Jumper 8P	1
L107	620 027 1240	AF Coil	1
L108	620 027 1240	AF Coil	1
PC107	620 209 3437	Wire,Jumper 2P,L=90	1
TC103	620 007 0867	Trimmer 10PF	1
T102	620 028 1348	MW Antenna Coil	1
T103	620 189 6008	IFT DET 10.7MHz 1st K	1
T104	620 189 6015	IFT DET 10.7MHz 2nd K	1
T105	620 190 3676	OSC Coil MW	1
T106	620 027 7419	IFT AM 450K	1
T107	620 191 6607	FTZ Antenna Filter	1
T108	620 026 4396	Anti Birdie Filter	1
VR101	620 006 1353	Potentiometer 100KB	1
VR102	620 006 1377	Potentiometer 10KB	1
VR103	620 006 1353	Potentiometer 100KB	1
VR105	620 006 3142	Potentiometer 470B	1
VR106	620 006 3142	Potentiometer 470B	1
W101	620 017 5784	Connector 1P Assy	1
X101	620 007 1338	Crystal 7.2MHz	1
or	620 007 3226	Crystal 7.2MHz	1
IC101	409 073 9505	IC LA1266	1
IC102	409 017 1008	IC LA3401	1
IC103	409 066 7600	IC LM7001	1
IC104	409 057 4403	IC UPC4570C	1
IC105	409 109 5105	IC LC7821	1
Q105	405 016 0806	TR 2SC2839-E	1
Q106	405 027 0505	TR 2SK246-GR	1
Q107	405 027 8402	TR 2SK583	1
Q108	405 004 5004	TR 2SA608-G-NP	1
or	405 004 4502	TR 2SA608-F-NP	1
Q109	405 019 3804	TR 2SC536-G-NP	1
or	405 019 2708	TR 2SC536-F-NP	1
Q110	405 004 5004	TR 2SA608-G-NP	1
or	405 004 4502	TR 2SA608-F-NP	1
Q112	405 004 5004	TR 2SA608-G-NP	1
or	405 004 4502	TR 2SA608-F-NP	1
Q113	405 019 3804	TR 2SC536-G-NP	1
or	405 019 2708	TR 2SC536-F-NP	1
Q114	405 019 3804	TR 2SC536-G-NP	1
or	405 019 2708	TR 2SC536-F-NP	1
Q115	405 021 0808	TR 2SD1012-H	1
or	405 021 0501	TR 2SD1012-G	1
Q118	405 004 5004	TR 2SA608-G-NP	1
or	405 004 4502	TR 2SA608-F-NP	1
Q121	405 021 0808	TR 2SD1012-H	1
or	405 021 0501	TR 2SD1012-G	1
Q122	405 021 0808	TR 2SD1012-H	1
or	405 021 0501	TR 2SD1012-G	1
Q123	405 016 9007	TR 2SC3066-G	1
or	405 016 8901	TR 2SC3066-F	1
Q124	405 016 9007	TR 2SC3066-G	1
or	405 016 8901	TR 2SC3066-F	1
Q125	405 002 9004	TR 2SA1208-T	1
or	405 002 8908	TR 2SA1208-S	1
Q126	405 002 9004	TR 2SA1208-T	1
or	405 002 8908	TR 2SA1208-S	1
Q127	405 016 3807	TR 2SC2910-T	1
or	405 016 3708	TR 2SC2910-S	1
Q128	405 016 3807	TR 2SC2910-T	1
or	405 016 3708	TR 2SC2910-S	1
Q131	405 019 3804	TR 2SC536-G-NP	1
or	405 019 2708	TR 2SC536-F-NP	1
Q132	405 019 3804	TR 2SC536-G-NP	1
or	405 019 2708	TR 2SC536-F-NP	1
Q133	405 004 5004	TR 2SA608-G-NP	1
or	405 004 4502	TR 2SA608-F-NP	1
Q134	405 004 5004	TR 2SA608-G-NP	1
or	405 004 4502	TR 2SA608-F-NP	1
Q145	405 019 3804	TR 2SC536-G-NP	1
or	405 019 2708	TR 2SC536-F-NP	1
Q146	405 004 5004	TR 2SA608-G-NP	1
or	405 004 4502	TR 2SA608-F-NP	1
Q147	405 019 3804	TR 2SC536-G-NP	1
or	405 019 2708	TR 2SC536-F-NP	1
Q148	405 019 3804	TR 2SC536-G-NP	1
or	405 019 2708	TR 2SC536-F-NP	1
Q149	405 022 8209	TR 2SD1682-T	1
or	405 022 8001	TR 2SD1682-S	1
Q150	405 034 5104	TR 2SK246-BL	1
Q151	405 007 5308	TR 2SB560-F-MP	1
or	405 007 5100	TR 2SB560-E-MP	1
Q152	405 004 5004	TR 2SA608-G-NP	1
or	405 004 4502	TR 2SA608-F-NP	1
Q153	405 023 8505	TR 2SD438-F-MP	1
or	405 023 8307	TR 2SD438-E-MP	1
Q154	405 023 8505	TR 2SD438-F-MP	1
or	405 023 8307	TR 2SD438-E-MP	1
Q155	405 034 5104	TR 2SK246-BL	1
Q156	405 034 5104	TR 2SK246-BL	1

If necessary, replace both Diode D105, D106 (SVC321) together with new ones which have the equivalent characteristics.

D105	407 000 4708	VARACTOR DI SVC321C-2	1
or	407 000 4807	VARACTOR DI SVC321D-2	1
D106	407 000 4708	VARACTOR DI SVC321C-2	1
or	407 000 4807	VARACTOR DI SVC321D-2	1
D108	407 050 4802	ZENER DIODE GZA5.1Y-BT	1
D111	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
D112	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
D113	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
D114	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
D115	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
D116	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
D117	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
D118	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
D119	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
D120	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
D121	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
D122	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
D123	407 049 7807	ZENER DIODE GZA18Y-BT	1
D124	407 049 6602	ZENER DIODE GZA13Y	1
D125	407 049 7401	ZENER DIODE GZA16X	1
D127	407 050 0200	ZENER DIODE GZA24Z-BT	1
D128	407 050 6301	ZENER DIODE GZA6.2Z-BT	1
D130	407 004 9709	DIODE DSK10C	1
D131	407 049 7401	ZENER DIODE GZA16X	1
D135	407 004 9709	DIODE DSK10C	1
D136	407 004 9709	DIODE DSK10C	1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty
D137	407 004 9709	DIODE DSK10C	1
D138	407 004 9709	DIODE DSK10C	1
D139	407 092 4105	DIODE DSA20TC-KD3	1
D140	407 092 4105	DIODE DSA20TC-KD3	1
D141	407 092 4105	DIODE DSA20TC-KD3	1
D142	407 092 4105	DIODE DSA20TC-KD3	1
D143	407 050 6301	ZENER DIODE GZA6.2Z-BT	1
D144	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
C114	403 001 1906	CERAMIC 0.01U M 16V	1
C115	403 074 2701	CERAMIC 0.047U Z 50V	1
C116	403 026 5408	CERAMIC 47P K 50V	1
C117	403 074 2701	CERAMIC 0.047U Z 50V	1
C118	403 074 2701	CERAMIC 0.047U Z 50V	1
C119	403 043 1100	ELECT 220U M 16V	1
C120	403 074 2701	CERAMIC 0.047U Z 50V	1
C121	403 074 2701	CERAMIC 0.047U Z 50V	1
C122	403 001 1906	CERAMIC 0.01U M 16V	1
C123	403 044 0300	ELECT 47U M 16V	1
C124	403 049 1708	ELECT 1U M 50V	1
C125	403 072 8200	CERAMIC 330P K 50V	1
C127	403 001 1906	CERAMIC 0.01U M 16V	1
C128	403 050 3708	ELECT 22U M 50V	1
C129	403 051 2106	ELECT 4.7U M 50V	1
C130	403 050 7805	ELECT 3.3U M 50V	1
C131	403 001 1906	CERAMIC 0.01U M 16V	1
C132	403 038 2402	ELECT 100U M 6.3V	1
C133	403 088 4104	STYRENE 430P J 50V	1
C134	403 018 4204	CERAMIC 22P K 50V	1
C135	403 049 5508	ELECT 10U M 50V	1
C136	403 057 0304	POLYESTER 0.01U J 50V	1
C137	403 060 8700	POLYESTER 0.033U K 50V	1
C138	403 044 0300	ELECT 47U M 16V	1
C139	403 001 1906	CERAMIC 0.01U M 16V	1
C140	403 056 7809	POLYESTER 1000P J 50V	1
C141	403 049 1708	ELECT 1U M 50V	1
C142	403 121 9509	CERAMIC 0.1U Z 50V	1
C143	403 075 0508	CERAMIC 6800P K 50V	1
C144	403 073 3204	CERAMIC 390P K 50V	1
C145	403 069 1207	CERAMIC 1000P K 50V	1
C146	403 049 5508	ELECT 10U M 50V	1
C147	403 073 7004	CERAMIC 470P K 50V	1
C148	403 073 7004	CERAMIC 470P K 50V	1
C149	403 049 1708	ELECT 1U M 50V	1
C150	403 049 1708	ELECT 1U M 50V	1
C151	403 060 6003	POLYESTER 3300P J 50V	1
C152	403 060 6003	POLYESTER 3300P J 50V	1
C153	403 001 1906	CERAMIC 0.01U M 16V	1
C154	403 050 1308	ELECT 2.2U M 50V	1
C155	403 048 7701	ELECT 0.47U M 50V	1
C156	403 049 1708	ELECT 1U M 50V	1
C157	403 062 0900	POLYESTER 0.047U K 50V	1
C158	403 001 1906	CERAMIC 0.01U M 16V	1
C159	403 042 3600	ELECT 100U M 16V	1
C160	403 022 0902	CERAMIC 30P J 50V	1
C161	403 022 0902	CERAMIC 30P J 50V	1
C163	403 001 1906	CERAMIC 0.01U M 16V	1
C164	403 038 7209	ELECT 220U M 6.3V	1
C165	403 069 1207	CERAMIC 1000P K 50V	1
C166	403 068 9402	CERAMIC 100P K 50V	1
C167	403 001 1906	CERAMIC 0.01U M 16V	1
C168	403 044 0300	ELECT 47U M 16V	1
C170	403 049 1708	ELECT 1U M 50V	1
C173	403 031 3901	CERAMIC 7P C 50V	1
C174	403 024 1501	CERAMIC 39P J 50V	1
C179	403 071 6207	CERAMIC 220P K 50V	1
C180	403 071 6207	CERAMIC 220P K 50V	1
C181	403 071 6207	CERAMIC 220P K 50V	1
C182	403 071 6207	CERAMIC 220P K 50V	1
C183	403 051 2106	ELECT 4.7U M 50V	1
C184	403 051 2106	ELECT 4.7U M 50V	1
C185	403 038 7209	ELECT 220U M 6.3V	1
C186	403 038 7209	ELECT 220U M 6.3V	1
C187	403 071 6207	CERAMIC 220P K 50V	1
C188	403 071 6207	CERAMIC 220P K 50V	1
C189	403 062 7305	POLYESTER 0.056U K 50V	1
C190	403 062 7305	POLYESTER 0.056U K 50V	1
C191	403 058 3106	POLYESTER 0.015U J 50V	1
C192	403 058 3106	POLYESTER 0.015U J 50V	1

Ref. No.	Part No.	Description	Q'ty
C193	403 051 2106	ELECT 4.7U M 50V	1
C194	403 051 2106	ELECT 4.7U M 50V	1
C195	403 044 0300	ELECT 47U M 16V	1
C196	403 044 0300	ELECT 47U M 16V	1
C197	403 069 8404	CERAMIC 0.01U Z 50V	1
C198	403 049 1708	ELECT 1U M 50V	1
C201	403 071 6207	CERAMIC 220P K 50V	1
C202	403 071 6207	CERAMIC 220P K 50V	1
C203	403 071 6207	CERAMIC 220P K 50V	1
C204	403 071 6207	CERAMIC 220P K 50V	1
C205	403 071 6207	CERAMIC 220P K 50V	1
C206	403 071 6207	CERAMIC 220P K 50V	1
C207	403 071 6207	CERAMIC 220P K 50V	1
C208	403 071 6207	CERAMIC 220P K 50V	1
C209	403 071 6207	CERAMIC 220P K 50V	1
C210	403 071 6207	CERAMIC 220P K 50V	1
C211	403 071 6207	CERAMIC 220P K 50V	1
C212	403 071 6207	CERAMIC 220P K 50V	1
C223	403 051 2106	ELECT 4.7U M 50V	1
C224	403 051 2106	ELECT 4.7U M 50V	1
C225	403 074 6303	CERAMIC 560P K 50V	1
C226	403 074 6303	CERAMIC 560P K 50V	1
C229	403 071 6207	CERAMIC 220P K 50V	1
C230	403 071 6207	CERAMIC 220P K 50V	1
C231	403 051 2106	ELECT 4.7U M 50V	1
C232	403 051 2106	ELECT 4.7U M 50V	1
C233	403 072 8200	CERAMIC 330P K 50V	1
C234	403 072 8200	CERAMIC 330P K 50V	1
C235	403 072 8200	CERAMIC 330P K 50V	1
C236	403 072 8200	CERAMIC 330P K 50V	1
C237	403 039 7901	ELECT 100U M 10V	1
C238	403 039 7901	ELECT 100U M 10V	1
C239	403 036 3005	CERAMIC 5P C 500V	1
C240	403 036 3005	CERAMIC 5P C 500V	1
C243	403 049 5508	ELECT 10U M 50V	1
C244	403 049 5508	ELECT 10U M 50V	1
C245	403 049 1708	ELECT 1U M 50V	1
C246	403 049 1708	ELECT 1U M 50V	1
C247	403 049 1708	ELECT 1U M 50V	1
C248	403 049 1708	ELECT 1U M 50V	1
C249	403 036 2503	CERAMIC 47P K 500V	1
C250	403 036 2503	CERAMIC 47P K 500V	1
C251	403 036 2503	CERAMIC 47P K 500V	1
C252	403 036 2503	CERAMIC 47P K 500V	1
C255	404 012 7000	CERAMIC 0.01U P 500V	1
C256	404 012 7000	CERAMIC 0.01U P 500V	1
C257	403 051 3905	ELECT 47U M 50V	1
C258	403 050 5405	ELECT 220U M 50V	1
C259	403 062 0900	POLYESTER 0.047U K 50V	1
C260	403 062 0900	POLYESTER 0.047U K 50V	1
C261	403 049 5508	ELECT 10U M 50V	1
C262	403 044 0300	ELECT 47U M 16V	1
C264	403 051 2106	ELECT 4.7U M 50V	1
C265	403 049 5508	ELECT 10U M 50V	1
C266	403 049 5508	ELECT 10U M 50V	1
C268	403 049 5508	ELECT 10U M 50V	1
C269	403 049 5508	ELECT 10U M 50V	1
C270	403 049 5508	ELECT 10U M 50V	1
C271	403 054 1304	ELECT 47U M 35V	1
C272	403 045 2907	ELECT 1000U M 25V	1
C273	403 054 2608	ELECT 470U M 35V	1
C274	403 069 8404	CERAMIC 0.01U Z 50V	1
C275	403 069 8404	CERAMIC 0.01U Z 50V	1
C276	404 012 6102	ELECT 4700U M 50V	1
C277	404 012 6102	ELECT 4700U M 50V	1
C278	404 012 7000	CERAMIC 0.01U P 500V	1
C279	404 012 7000	CERAMIC 0.01U P 500V	1
C280	403 049 5508	ELECT 10U M 50V	1
C281	403 039 7901	ELECT 100U M 10V	1
C283	403 049 5508	ELECT 10U M 50V	1
C284	403 069 1207	CERAMIC 1000P K 50V	1
C333	403 049 5508	ELECT 10U M 50V	1
C334	403 049 5508	ELECT 10U M 50V	1
C335	403 069 8404	CERAMIC 0.01U Z 50V	1
C336	403 069 8404	CERAMIC 0.01U Z 50V	1
C337	403 036 3005	CERAMIC 5P C 500V	1
C338	403 036 3005	CERAMIC 5P C 500V	1
C341	403 022 7703	CERAMIC 33P J 50V	1
C342	403 069 8404	CERAMIC 0.01U Z 50V	1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description		Q'ty
C343	403 069 8404	CERAMIC	0.01U Z 50V	1
R113	401 022 0403	CARBON	68 JA 1/4W	1
R114	401 025 7805	CARBON	2.2K JA 1/6W	1
R115	401 026 6609	CARBON	390 JA 1/6W	1
R116	401 026 6609	CARBON	390 JA 1/6W	1
R117	401 027 8305	CARBON	820 JA 1/6W	1
R118	401 012 4503	CARBON	100 JA 1/4W	1
R119	401 024 7707	CARBON	100K JA 1/6W	1
R120	401 024 7004	CARBON	1K JA 1/6W	1
R121	401 024 8001	CARBON	1M JA 1/6W	1
R122	401 026 1000	CARBON	2.7K JA 1/6W	1
R123	401 026 6609	CARBON	390 JA 1/6W	1
R124	401 012 5708	CARBON	1K JA 1/4W	1
R125	401 012 4503	CARBON	100 JA 1/4W	1
R126	401 025 1902	CARBON	15K JA 1/6W	1
R127	401 019 9303	CARBON	47 JB 1/4W	1
R128	401 026 4308	CARBON	3.3K JA 1/6W	1
R129	401 025 8208	CARBON	22K JA 1/6W	1
R130	401 026 9907	CARBON	4.7K JA 1/6W	1
R131	401 026 9907	CARBON	4.7K JA 1/6W	1
R132	401 025 8208	CARBON	22K JA 1/6W	1
R133	401 024 7707	CARBON	100K JA 1/6W	1
R134	401 026 4308	CARBON	3.3K JA 1/6W	1
R135	401 027 5502	CARBON	6.8K JA 1/6W	1
R136	401 024 6700	CARBON	100 JA 1/6W	1
R137	401 024 8704	CARBON	110K JA 1/6W	1
R138	401 024 8704	CARBON	110K JA 1/6W	1
R139	401 025 4903	CARBON	180K JA 1/6W	1
R140	401 025 4903	CARBON	180K JA 1/6W	1
R141	401 025 7805	CARBON	2.2K JA 1/6W	1
R142	401 025 7805	CARBON	2.2K JA 1/6W	1
R143	401 024 7707	CARBON	100K JA 1/6W	1
R144	401 024 7707	CARBON	100K JA 1/6W	1
R145	401 018 3807	CARBON	3.3K JA 1/4W	1
R146	401 026 4308	CARBON	3.3K JA 1/6W	1
R147	401 026 4308	CARBON	3.3K JA 1/6W	1
R148	401 024 7400	CARBON	10K JA 1/6W	1
R149	401 024 7707	CARBON	100K JA 1/6W	1
R150	401 024 7400	CARBON	10K JA 1/6W	1
R151	401 027 0309	CARBON	47K JA 1/6W	1
R152	401 024 7400	CARBON	10K JA 1/6W	1
R153	401 027 0309	CARBON	47K JA 1/6W	1
R154	401 024 7400	CARBON	10K JA 1/6W	1
R155	401 026 4308	CARBON	3.3K JA 1/6W	1
R156	401 023 0709	CARBON	82 JA 1/4W	1
R157	401 027 0309	CARBON	47K JA 1/6W	1
R158	401 024 7400	CARBON	10K JA 1/6W	1
R159	401 026 3905	CARBON	330 JA 1/6W	1
R162	402 039 6105	OXIDE-MT	180 JB 1/2W	1
R163	401 024 7004	CARBON	1K JA 1/6W	1
R164	401 024 7400	CARBON	10K JA 1/6W	1
R165	401 012 7009	CARBON	10K JA 1/4W	1
R166	401 024 7004	CARBON	1K JA 1/6W	1
R167	401 026 4308	CARBON	3.3K JA 1/6W	1
R168	401 019 9600	CARBON	47 JA 1/4W	1
R169	401 016 3809	CARBON	2.2K JA 1/4W	1
R170	401 027 0309	CARBON	47K JA 1/6W	1
R171	401 024 7400	CARBON	10K JA 1/6W	1
R172	401 026 7408	CARBON	39K JA 1/6W	1
R173	401 027 0309	CARBON	47K JA 1/6W	1
R174	401 027 9005	CARBON	82K JA 1/6W	1
R175	401 027 9005	CARBON	82K JA 1/6W	1
R176	401 025 7805	CARBON	2.2K JA 1/6W	1
R181	401 024 7004	CARBON	1K JA 1/6W	1
R182	401 024 7004	CARBON	1K JA 1/6W	1
R183	401 024 7707	CARBON	100K JA 1/6W	1
R184	401 024 7707	CARBON	100K JA 1/6W	1
R185	401 024 7707	CARBON	100K JA 1/6W	1
R186	401 024 7707	CARBON	100K JA 1/6W	1
R187	401 024 6700	CARBON	100 JA 1/6W	1
R188	401 024 6700	CARBON	100 JA 1/6W	1
R189	401 027 3003	CARBON	56K JA 1/6W	1
R190	401 027 3003	CARBON	56K JA 1/6W	1
R191	401 026 9907	CARBON	4.7K JA 1/6W	1
R192	401 026 9907	CARBON	4.7K JA 1/6W	1
R193	401 024 7707	CARBON	100K JA 1/6W	1
R194	401 024 7707	CARBON	100K JA 1/6W	1
R195	401 024 7004	CARBON	1K JA 1/6W	1
R196	401 012 5708	CARBON	1K JA 1/4W	1
R197	401 013 4205	CARBON	120 JA 1/4W	1
R198	401 013 4205	CARBON	120 JA 1/4W	1
R199	401 024 7004	CARBON	1K JA 1/6W	1
R200	401 012 5708	CARBON	1K JA 1/4W	1
R201	401 024 7004	CARBON	1K JA 1/6W	1
R202	401 012 5708	CARBON	1K JA 1/4W	1
R203	401 024 7004	CARBON	1K JA 1/6W	1
R204	401 012 5708	CARBON	1K JA 1/4W	1
R205	401 024 7004	CARBON	1K JA 1/6W	1
R206	401 012 5708	CARBON	1K JA 1/4W	1
R207	401 012 5708	CARBON	1K JA 1/4W	1
R208	401 012 5708	CARBON	1K JA 1/4W	1
R209	401 012 5708	CARBON	1K JA 1/4W	1
R210	401 012 5708	CARBON	1K JA 1/4W	1
R211	401 024 8001	CARBON	1M JA 1/6W	1
R212	401 024 8001	CARBON	1M JA 1/6W	1
R213	401 024 8001	CARBON	1M JA 1/6W	1
R214	401 024 8001	CARBON	1M JA 1/6W	1
R215	401 024 8001	CARBON	1M JA 1/6W	1
R216	401 024 8001	CARBON	1M JA 1/6W	1
R217	401 026 4902	CARBON	330K JA 1/6W	1
R218	401 026 4902	CARBON	330K JA 1/6W	1
R219	401 024 8001	CARBON	1M JA 1/6W	1
R220	401 024 8001	CARBON	1M JA 1/6W	1
R221	401 026 4902	CARBON	330K JA 1/6W	1
R222	401 026 4902	CARBON	330K JA 1/6W	1
R223	401 024 7400	CARBON	10K JA 1/6W	1
R224	401 016 1508	CARBON	22 JA 1/4W	1
R225	401 016 1508	CARBON	22 JA 1/4W	1
R249	401 025 4200	CARBON	1.8K JA 1/6W	1
R250	401 025 4200	CARBON	1.8K JA 1/6W	1
R251	401 024 7707	CARBON	100K JA 1/6W	1
R252	401 024 7707	CARBON	100K JA 1/6W	1
R257	401 024 7400	CARBON	10K JA 1/6W	1
R258	401 024 7400	CARBON	10K JA 1/6W	1
R259	401 012 5708	CARBON	1K JA 1/4W	1
R260	401 012 5708	CARBON	1K JA 1/4W	1
R263	401 027 0309	CARBON	47K JA 1/6W	1
R264	401 027 0309	CARBON	47K JA 1/6W	1
R265	401 025 1902	CARBON	15K JA 1/6W	1
R266	401 025 1902	CARBON	15K JA 1/6W	1
R267	401 016 3809	CARBON	2.2K JA 1/4W	1
R268	401 016 3809	CARBON	2.2K JA 1/4W	1
R269	401 016 3809	CARBON	2.2K JA 1/4W	1
R270	401 016 3809	CARBON	2.2K JA 1/4W	1
R271	401 025 4200	CARBON	1.8K JA 1/6W	1
R272	401 025 4200	CARBON	1.8K JA 1/6W	1
R273	402 037 6909	FUSIBLE RES	82 JA 1/4W	1
R274	402 037 6909	FUSIBLE RES	82 JA 1/4W	1
R279	402 037 6909	FUSIBLE RES	82 JA 1/4W	1
R280	402 037 6909	FUSIBLE RES	82 JA 1/4W	1
R281	401 018 4903	CARBON	33K JA 1/4W	1
R282	401 018 4903	CARBON	33K JA 1/4W	1
R283	401 020 2904	CARBON	47K JA 1/4W	1
R284	401 020 2904	CARBON	47K JA 1/4W	1
R285	401 024 7004	CARBON	1K JA 1/6W	1
R286	401 024 7004	CARBON	1K JA 1/6W	1
R287	401 016 0105	CARBON	20K JA 1/4W	1
R288	401 016 0105	CARBON	20K JA 1/4W	1
R289	402 015 3203	FUSIBLE RES	1K J- 1/4W	1
R290	402 015 3203	FUSIBLE RES	1K J- 1/4W	1
R291	402 015 3203	FUSIBLE RES	1K J- 1/4W	1
R292	402 015 3203	FUSIBLE RES	1K J- 1/4W	1
R293	402 037 7104	FUSIBLE RES	2.2 JA 1/4W	1
R294	402 037 7104	FUSIBLE RES	2.2 JA 1/4W	1
R295	402 037 7104	FUSIBLE RES	2.2 JA 1/4W	1
R296	402 037 7104	FUSIBLE RES	2.2 JA 1/4W	1
R297	402 039 9403	OXIDE-MT	330 JB 1W	1
R298	402 039 9403	OXIDE-MT	330 JB 1W	1
R299	401 165 4405	OXIDE-MT	0.33 JB 2W	1
R299A	401 165 4405	OXIDE-MT	0.33 JB 2W	1
R300	401 165 4405	OXIDE-MT	0.33 JB 2W	1
R300A	401 165 4405	OXIDE-MT	0.33 JB 2W	1
R301	401 012 4503	CARBON	100 JA 1/4W	1
R302	401 012 4503	CARBON	100 JA 1/4W	1
R303	402 039 5900	OXIDE-MT	10 JB 2W	1
R304	402 039 5900	OXIDE-MT	10 JB 2W	1
R305	402 037 7005	FUSIBLE RES	47 JA 1/4W	1
R306	402 037 7005	FUSIBLE RES	47 JA 1/4W	1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty
R307	401 027 0309	CARBON 47K JA 1/6W	1
R308	401 027 0309	CARBON 47K JA 1/6W	1
R311	401 025 8208	CARBON 22K JA 1/6W	1
R312	401 027 0309	CARBON 47K JA 1/6W	1
R313	401 025 8208	CARBON 22K JA 1/6W	1
R314	401 025 1902	CARBON 15K JA 1/6W	1
R315	401 027 2600	CARBON 5.6K JA 1/6W	1
R316	401 012 7009	CARBON 10K JA 1/4W	1
R317	401 027 0309	CARBON 47K JA 1/6W	1
R318	401 025 8208	CARBON 22K JA 1/6W	1
R322	401 027 0309	CARBON 47K JA 1/6W	1
R323	401 027 0309	CARBON 47K JA 1/6W	1
R324	401 024 7400	CARBON 10K JA 1/6W	1
R325	401 024 7400	CARBON 10K JA 1/6W	1
R326	401 026 9907	CARBON 4.7K JA 1/6W	1
R327	401 012 5708	CARBON 1K JA 1/4W	1
R328	401 024 7400	CARBON 10K JA 1/6W	1
R330	401 024 7004	CARBON 1K JA 1/6W	1
R331	401 025 9809	CARBON 2.4K JA 1/6W	1
R332	401 025 9809	CARBON 2.4K JA 1/6W	1
R340	402 039 8802	OXIDE-MT 2.2K JB 1W	1
R341	402 040 6101	OXIDE-MT 10 JB 1/2W	1
R342	402 040 6705	OXIDE-MT 56 JB 1/2W	1
R345	402 039 9304	OXIDE-MT 390 JB 1W	1
R346	402 040 5401	OXIDE-MT 820 JB 1/2W	1
R347	402 040 5906	OXIDE-MT 2.2K JB 1/2W	1
R348	401 026 1307	CARBON 27K JA 1/6W	1
R349	401 024 9305	CARBON 1.2K JA 1/6W	1
R350	401 012 4503	CARBON 100 JA 1/4W	1
R351	401 012 4503	CARBON 100 JA 1/4W	1
R352	401 024 7400	CARBON 10K JA 1/6W	1
R353	402 040 6705	OXIDE-MT 56 JB 1/2W	1
R354	401 024 7004	CARBON 1K JA 1/6W	1
R365	402 015 3708	FUSIBLE RES 2.2 J- 1/4W	1
R366	402 037 7104	FUSIBLE RES 2.2 JA 1/4W	1
R367	402 015 3708	FUSIBLE RES 2.2 J- 1/4W	1
R368	402 037 7104	FUSIBLE RES 2.2 JA 1/4W	1
ASSY,PCB,TRANSISTOR L,P			
42	620 211 2954	Assy,PCB,Transistor L,P	1
Q135	405 042 9507	TR 2SC3902-S	1
or	405 042 9408	TR 2SC3902-R	1
ASSY,PCB,TRANSISTOR L,M			
43	620 211 2961	Assy,PCB,Transistor L,M	1
Q137	405 042 4106	TR 2SA1507-S	1
or	405 042 4007	TR 2SA1507-R	1
ASSY,PCB,TRANSISTOR R,P			
44	620 211 2978	Assy,PCB,Transistor R,P	1
Q136	405 042 9507	TR 2SC3902-S	1
or	405 042 9408	TR 2SC3902-R	1
ASSY,PCB,TRANSISTOR R,M			
45	620 211 2985	Assy,PCB,Transistor R,M	1
Q138	405 042 4106	TR 2SA1507-S	1
or	405 042 4007	TR 2SA1507-R	1
ASSY,PCB,BIAS LEFT			
46	620 211 2992	Assy,PCB,Bias Left	1
Q129	405 043 3504	TR 2SD1682-R	1
or	405 022 8001	TR 2SD1682-S	1
ASSY,PCB,BIAS RIGHT			
47	620 211 3005	Assy,PCB,Bias Right	1
Q130	405 022 8209	TR 2SD1682-T	1
or	405 022 8001	TR 2SD1682-S	1
ASSY,PCB,CONTROL			
48	620 209 1082	Assy,PCB,Control	1
	620 206 5519	Shield,Cover	1
	620 206 5526	Shield,Plate	1
	620 204 3319	Spacer,LED,Loud	1
	620 204 3388	Spacer,FL	1
	620 203 6120	Fluorescent Tube,8MT54GK	1
SW501	620 016 7796	Tact Switch (1)	1
SW502	620 016 7796	Tact Switch (2)	1
SW503	620 016 7796	Tact Switch (3)	1
SW504	620 016 7796	Tact Switch (4)	1

Ref. No.	Part No.	Description	Q'ty
SW505	620 016 7796	Tact Switch (5)	1
SW506	620 016 7796	Tact Switch (6)	1
SW507	620 016 7796	Tact Switch (7)	1
SW508	620 016 7796	Tact Switch (8)	1
SW509	620 016 7796	Tact Switch (9)	1
SW510	620 016 7796	Tact Switch (0)	1
SW511	620 016 7796	Tact Switch (FM)	1
SW512	620 016 7796	Tact Switch (AM)	1
SW513	620 016 7796	Tact Switch (AUTO/MANUAL)	1
SW515	620 016 7796	Tact Switch (LOUDNESS)	1
SW516	620 016 7796	Tact Switch (TUNING MODE)	1
SW518	620 016 7796	Tact Switch (MEMO)	1
SW519	620 016 7796	Tact Switch (SCAN LEVEL)	1
SW520	620 016 7796	Tact Switch (DIRECT IN)	1
SW521	620 016 7796	Tact Switch (TUNING UP)	1
SW522	620 016 7796	Tact Switch (TUNING DOWN)	1
SW523	620 016 7796	Tact Switch (PHONO)	1
SW524	620 016 7796	Tact Switch (CD)	1
SW525	620 016 7796	Tact Switch (AUX)	1
SW526	620 016 7796	Tact Switch (TAPE-1)	1
SW527	620 016 7796	Tact Switch (TAPE-2)	1
SW528	620 016 7796	Tact Switch (TUNER)	1
VR501	620 205 0393	VR,Slide,2X150KW	1
VR502	620 205 0393	VR,Slide,2X150KW	1
VR503	620 205 0393	VR,Slide,2X150KW	1
VR504	620 205 0393	VR,Slide,2X150KW	1
VR505	620 205 0393	VR,Slide,2X150KW	1
VR506	620 205 0409	VR,Slide,150KW	1
VR507	620 209 1853	VR,Rotary,2X100KA	1
Q501	405 012 8608	TR 2SC2021-S	1
or	405 012 8509	TR 2SC2021-R	1
Q502	405 012 8608	TR 2SC2021-S	1
or	405 012 8509	TR 2SC2021-R	1
Q503	405 012 8608	TR 2SC2021-S	1
or	405 012 8509	TR 2SC2021-R	1
Q504	405 012 8608	TR 2SC2021-S	1
or	405 012 8509	TR 2SC2021-R	1
Q505	405 012 8608	TR 2SC2021-S	1
or	405 012 8509	TR 2SC2021-R	1
Q506	405 012 8608	TR 2SC2021-S	1
or	405 012 8509	TR 2SC2021-R	1
Q507	405 012 8608	TR 2SC2021-S	1
or	405 012 8509	TR 2SC2021-R	1
Q508	405 012 8608	TR 2SC2021-S	1
or	405 012 8509	TR 2SC2021-R	1
Q509	405 012 8608	TR 2SC2021-S	1
or	405 012 8509	TR 2SC2021-R	1
Q510	405 012 8608	TR 2SC2021-S	1
or	405 012 8509	TR 2SC2021-R	1
Q511	405 012 8608	TR 2SC2021-S	1
or	405 012 8509	TR 2SC2021-R	1
Q512	405 004 5004	TR 2SA608-G-NP	1
or	405 004 4502	TR 2SA608-F-NP	1
Q513	405 019 3804	TR 2SC536-G-NP	1
or	405 019 2708	TR 2SC536-F-NP	1
D501	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
D502	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
D503	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
D504	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
D505	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
D506	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
D507	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
D508	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
D509	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
D510	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
D512	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
D513	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty
D514	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
D516	407 005 3805	DIODE DS442-BT	1
D517	407 065 5009	LED SLP-190B-51	1
D518	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
C501	403 050 1308	ELECT 2.2U M 50V	1
C502	403 050 1308	ELECT 2.2U M 50V	1
C503	403 059 5802	POLYESTER 0.022U J 50V	1
C504	403 059 5802	POLYESTER 0.022U J 50V	1
C505	403 048 7602	ELECT 0.47U M 50V	1
C506	403 048 7602	ELECT 0.47U M 50V	1
C507	403 057 0304	POLYESTER 0.01U J 50V	1
C508	403 057 0304	POLYESTER 0.01U J 50V	1
C509	403 063 8103	POLYESTER 0.082U K 50V	1
C510	403 063 8103	POLYESTER 0.082U K 50V	1
C511	403 061 8006	POLYESTER 4700P J 50V	1
C512	403 061 8006	POLYESTER 4700P J 50V	1
C513	403 059 5802	POLYESTER 0.022U J 50V	1
C514	403 059 5802	POLYESTER 0.022U J 50V	1
C515	403 058 1003	POLYESTER 1500P J 50V	1
C516	403 058 1003	POLYESTER 1500P J 50V	1
C517	403 062 5004	POLYESTER 5600P J 50V	1
C518	403 062 5004	POLYESTER 5600P J 50V	1
C519	403 074 9205	CERAMIC 680P K 50V	1
C520	403 074 9205	CERAMIC 680P K 50V	1
C521	403 038 2303	ELECT 100U M 6.3V	1
C523	403 073 7004	CERAMIC 470P K 50V	1
R501	401 025 2305	CARBON 150K JA 1/6W	1
R502	401 025 2305	CARBON 150K JA 1/6W	1
R503	401 027 9005	CARBON 82K JA 1/6W	1
R504	401 027 9005	CARBON 82K JA 1/6W	1
R505	401 027 3003	CARBON 56K JA 1/6W	1
R506	401 027 3003	CARBON 56K JA 1/6W	1
R507	401 027 0309	CARBON 47K JA 1/6W	1
R508	401 027 0309	CARBON 47K JA 1/6W	1
R509	401 026 1307	CARBON 27K JA 1/6W	1
R510	401 026 1307	CARBON 27K JA 1/6W	1
R511	401 027 8305	CARBON 820 JA 1/6W	1
R512	401 027 8305	CARBON 820 JA 1/6W	1
R513	401 024 7004	CARBON 1K JA 1/6W	1
R514	401 024 7004	CARBON 1K JA 1/6W	1
R515	401 024 7004	CARBON 1K JA 1/6W	1
R516	401 024 7004	CARBON 1K JA 1/6W	1
R517	401 024 7004	CARBON 1K JA 1/6W	1
R518	401 024 7004	CARBON 1K JA 1/6W	1
R519	401 024 7004	CARBON 1K JA 1/6W	1
R520	401 024 7004	CARBON 1K JA 1/6W	1
R521	401 026 6609	CARBON 390 JA 1/6W	1
R522	401 026 6609	CARBON 390 JA 1/6W	1
R523	401 026 6609	CARBON 390 JA 1/6W	1
R524	401 026 6609	CARBON 390 JA 1/6W	1
R525	401 026 6609	CARBON 390 JA 1/6W	1
R526	401 026 6609	CARBON 390 JA 1/6W	1
R527	401 026 6609	CARBON 390 JA 1/6W	1
R528	401 026 6609	CARBON 390 JA 1/6W	1
R529	401 026 6609	CARBON 390 JA 1/6W	1
R530	401 026 6609	CARBON 390 JA 1/6W	1
R531	401 024 7400	CARBON 10K JA 1/6W	1
R532	401 024 7400	CARBON 10K JA 1/6W	1
R533	401 024 7400	CARBON 10K JA 1/6W	1
R534	401 024 7400	CARBON 10K JA 1/6W	1
R535	401 024 7400	CARBON 10K JA 1/6W	1
R536	401 024 7400	CARBON 10K JA 1/6W	1
R537	401 024 7400	CARBON 10K JA 1/6W	1
R538	401 024 7400	CARBON 10K JA 1/6W	1
R539	401 024 7400	CARBON 10K JA 1/6W	1
R540	401 024 7400	CARBON 10K JA 1/6W	1
R541	401 024 7400	CARBON 10K JA 1/6W	1
R542	401 027 0309	CARBON 47K JA 1/6W	1
R543	401 024 7400	CARBON 10K JA 1/6W	1
R544	401 027 0309	CARBON 47K JA 1/6W	1
R545	401 025 0004	CARBON 120K JA 1/6W	1
R546	401 025 0004	CARBON 120K JA 1/6W	1
R547	401 024 7400	CARBON 10K JA 1/6W	1
R549	401 023 1706	CARBON 820 JA 1/4W	1
R550	401 027 0309	CARBON 47K JA 1/6W	1

Ref. No.	Part No.	Description	Q'ty
ASSY,PCB,MICOM			
49	620 209 1099	Assy,PCB,Micom	1
CN102	620 204 9311	Connector-S,9115S-11L,11P	1
CN103	620 204 9311	Connector-S,9115S-11L,11P	1
CX601	620 026 9070	CSA 4.19M Resonator	1
RB601	620 004 5544	Resistor 5X10K	1
RB602	620 004 5575	Resistor 4X100K J	1
IC601	410 092 6802	IC TMP47C870N-4664Z	1
Q601	405 004 5004	TR 2SA608-G-NP	1
or	405 004 4502	TR 2SA608-F-NP	1
Q602	405 019 3804	TR 2SC536-G-NP	1
or	405 019 2708	TR 2SC536-F-NP	1
Q603	405 004 5004	TR 2SA608-G-NP	1
or	405 004 4502	TR 2SA608-F-NP	1
Q604	405 019 3804	TR 2SC536-G-NP	1
or	405 019 2708	TR 2SC536-F-NP	1
D601	407 069 1205	DIODE DS441	1
D602	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
D603	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
D604	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
D605	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
D606	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
D607	407 008 0405	DIODE GMB01-BT	1
or	407 125 8209	DIODE HSS271	1
C601	403 039 7802	ELECT 100U M 10V	1
C602	404 039 4402	ELECT 100U M 10V	1
or	404 032 5802	ELECT 100U M 10V	1
C603	403 001 1906	CERAMIC 0.01U M 16V	1
C604	404 032 2207	ELECT 2200U M 10V	1
or	404 039 4303	ELECT 2200U M 10V	1
or	404 052 1303	ELECT 2200U T 5.5V	1
C605	403 177 9201	CERAMIC 33P K 50V	1
C606	403 177 9201	CERAMIC 33P K 50V	1
C607	403 001 1906	CERAMIC 0.01U M 16V	1
C608	403 049 1609	ELECT 1U M 50V	1
C609	403 049 5508	ELECT 10U M 50V	1
C610	403 001 1906	CERAMIC 0.01U M 16V	1
R601	401 020 0801	CARBON 470 JA 1/4W	1
R602	401 026 9907	CARBON 4.7K JA 1/6W	1
R603	401 024 7400	CARBON 10K JA 1/6W	1
R604	401 026 9907	CARBON 4.7K JA 1/6W	1
R605	401 026 4308	CARBON 3.3K JA 1/6W	1
R606	401 025 7805	CARBON 2.2K JA 1/6W	1
R607	401 025 0608	CARBON 1.3K JA 1/6W	1
R608	401 026 9907	CARBON 4.7K JA 1/6W	1
R609	401 027 0309	CARBON 47K JA 1/6W	1
R610	401 024 7400	CARBON 10K JA 1/6W	1
R611	401 027 0309	CARBON 47K JA 1/6W	1
R612	401 024 7707	CARBON 100K JA 1/6W	1
R613	401 027 0507	CARBON 470K JA 1/6W	1
ASSY,PCB,GRAPHIC EQUALIZE			
50	620 209 1105	Assy,PCB,Graphic Equalize	1
CN101	620 204 9311	Connector-S,9115S-11L,11P	1
IC401	409 018 4503	IC LA6458DS	1
IC402	409 166 5308	IC TC9215P	1
IC403	409 018 4503	IC LA6458DS	1
C401	403 051 2106	ELECT 4.7U M 50V	1
C402	403 051 2106	ELECT 4.7U M 50V	1
C403	403 068 9402	CERAMIC 100P K 50V	1
C404	403 068 9402	CERAMIC 100P K 50V	1
C405	403 068 9402	CERAMIC 100P K 50V	1
C406	403 068 9402	CERAMIC 100P K 50V	1
C407	403 049 5508	ELECT 10U M 50V	1
C408	403 049 5508	ELECT 10U M 50V	1
C409	403 051 2106	ELECT 4.7U M 50V	1
C410	403 051 2106	ELECT 4.7U M 50V	1
C411	403 072 4707	CERAMIC 270P K 50V	1
C412	403 072 4707	CERAMIC 270P K 50V	1
C413	403 062 0900	POLYESTER 0.047U K 50V	1
C414	403 062 0900	POLYESTER 0.047U K 50V	1
C415	403 051 2106	ELECT 4.7U M 50V	1
C416	403 051 2106	ELECT 4.7U M 50V	1
C417	403 068 9402	CERAMIC 100P K 50V	1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty
C418	403 068 9402	CERAMIC 100P K 50V	1
C421	403 068 9402	CERAMIC 100P K 50V	1
C422	403 068 9402	CERAMIC 100P K 50V	1
C423	403 044 0300	ELECT 47U M 16V	1
C424	403 044 0300	ELECT 47U M 16V	1
R401	401 025 0004	CARBON 120K JA 1/6W	1
R402	401 025 0004	CARBON 120K JA 1/6W	1
R403	401 025 0004	CARBON 120K JA 1/6W	1
R404	401 025 0004	CARBON 120K JA 1/6W	1
R405	401 026 7002	CARBON 3.9K JA 1/6W	1
R406	401 026 7002	CARBON 3.9K JA 1/6W	1
R407	401 026 7002	CARBON 3.9K JA 1/6W	1
R408	401 026 7002	CARBON 3.9K JA 1/6W	1
R409	401 022 3107	CARBON 6.8K JA 1/4W	1
R410	401 027 5502	CARBON 6.8K JA 1/6W	1
R411	401 024 7004	CARBON 1K JA 1/6W	1
R412	401 024 7004	CARBON 1K JA 1/6W	1
R413	401 024 7707	CARBON 100K JA 1/6W	1
R414	401 024 7707	CARBON 100K JA 1/6W	1
R415	401 024 7004	CARBON 1K JA 1/6W	1
R416	401 024 7004	CARBON 1K JA 1/6W	1
R417	401 026 9907	CARBON 4.7K JA 1/6W	1
R418	401 026 9907	CARBON 4.7K JA 1/6W	1
R419	401 027 0309	CARBON 47K JA 1/6W	1
ASSY,PCB,POWER SWITCH			
51	620 209 1112	Assy,PCB,Power Switch	1
	620 189 5216	Terminal 2P	1
	620 204 3326	Spacer,LED,Power	1
	620 199 4568	Jack,Headphone,3P, (D6.43)	1
	620 053 6899	Cover Safety	1
	620 055 3964	Jumper	1
	620 055 2776	Jumper	1
C701 ⚠	620 006 6679	Capacitor 0.01MF400V	1
SW701⚠	620 015 2365	Power Switch (POWER)	1
SW702	620 188 8393	Push 1KEY (SP A)	1
SW703	620 188 8393	Push 1KEY (SP B)	1
D701	407 065 5009	LED SLP-190B-51 (POWER)	1
R701	402 039 6006	OXIDE-MT 390 JB 2W	1
R702	402 039 6006	OXIDE-MT 390 JB 2W	1
R703	401 014 2903	CARBON 150 JA 1/4W	1
R704	401 014 2903	CARBON 150 JA 1/4W	1
ASSY,PCB,SPEAKER TERMINAL			
52	620 209 1129	Assy,PCB,Speaker Terminal	1
	620 022 2587	EC Terminal 1P	2
	620 185 1953	Push Terminal 8P	1
	620 202 4196	Terminal,Wrapper,3P	1
PC705	620 209 2997	Wire,Jumper,8P L = 150	1
C715	403 074 6303	CERAMIC 560P K 50V	1
C716	403 074 6303	CERAMIC 560P K 50V	1
C717	403 074 6303	CERAMIC 560P K 50V	1
C718	403 074 6303	CERAMIC 560P K 50V	1
R713	401 026 1000	CARBON 2.7K JA 1/6W	1
ASSY,PCB,MICOM JUMPER			
53	620 209 1136	Assy,PCB,Micom Jumper	1
	620 209 1044	PCB,Micom Jumper	1
ASSY,PCB,VOLUME JUMPER			
54	620 209 1143	Assy,PCB,Volume Jumper	1
	620 209 1051	PCB,Volume Jumper	1
ASSY,PCB,FUSE			
55	620 209 1150	Assy,PCB,Fuse	1
	620 209 2805	PCB,Trans Jumper	1
	620 202 3496	Fuse Holder	8
F101 ⚠	423 005 0507	FUSE 250V T1A	1
F102 ⚠	423 005 0507	FUSE 250V T1A	1
F104 ⚠	423 007 2103	FUSE 250V T4A	1
F105 ⚠	423 007 2103	FUSE 250V T4A	1
PC106	620 209 2980	Wire,Jumper,8P L = 140	1
ASSY,PCB,ANTENNA TERMINAL			
56	620 209 1167	Assy,PCB,Antenna Terminal	1
	620 022 2921	ANT Terminal 3P	1
	620 050 2450	Metal Mount Antenna	1
CN801	620 021 7750	Plug 2P	1
CN802	620 209 4885	Socket,52012-0210,2P	1

Ref. No.	Part No.	Description	Q'ty
CN803	620 209 4885	Socket,52012-0210,2P	1
L801	620 197 9442	Inductor 470UH K	1
R801	401 018 3807	CARBON 3.3K JA 1/4W	1

NOTES:

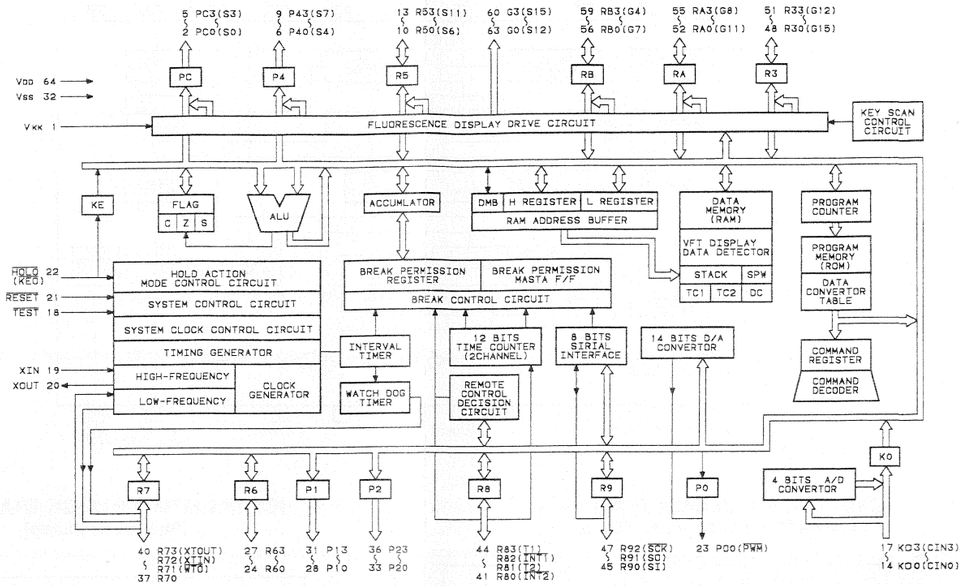
1. Parts order must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and resistors must be multiple of 10 pcs.

PRODUCT SAFETY NOTICE

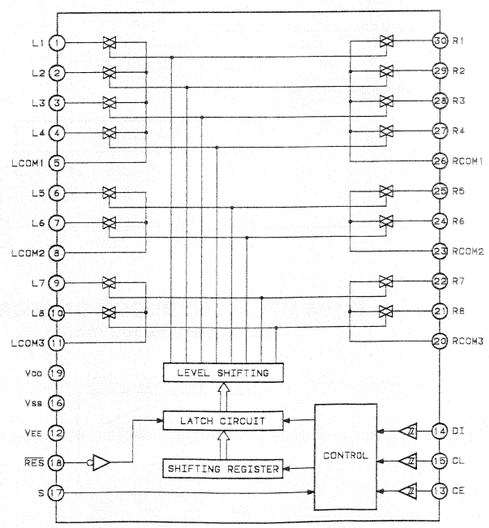
Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol ⚠ in the parts list and the schematic diagram designate components in which safety can be of special significance. When replacing a component identified with ⚠, use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

IC BLOCK DIAGRAM

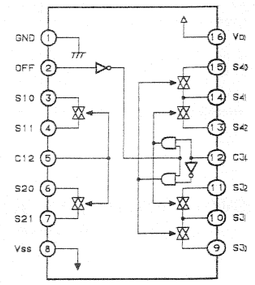
IC601 TMP47C870N-4664Z BLOCK DIAGRAM
(Tuner/Function Control Micro Computer)



IC105 LC7821 BLOCK DIAGRAM
(Function Selector)

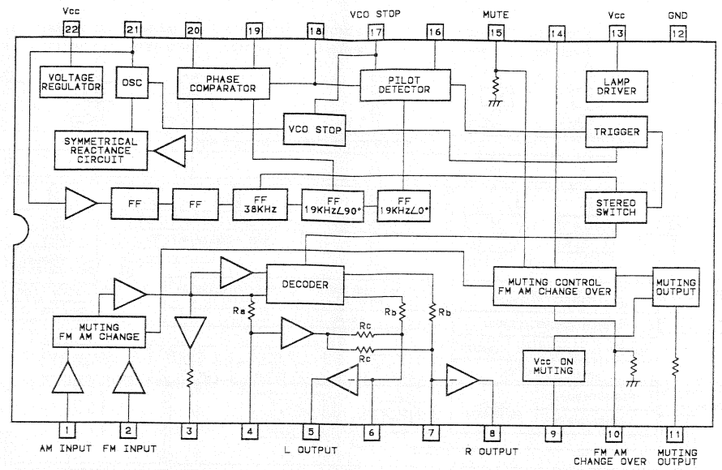


IC402 TC9215P BLOCK DIAGRAM
(Loudness Control)

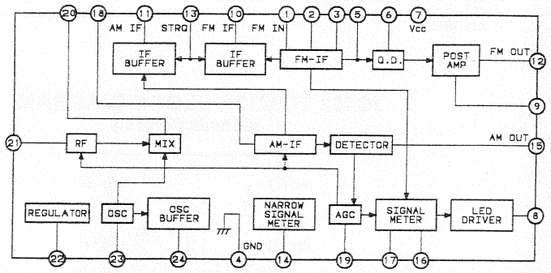


IC BLOCK DIAGRAM (Continued)

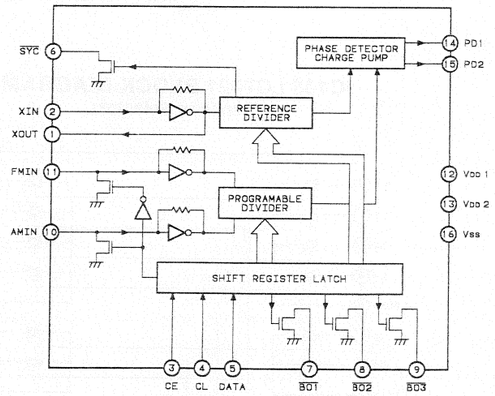
IC102 LA3401 BLOCK DIAGRAM
(FM MPX & FM AM Change Control)



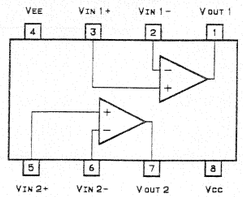
IC101 LA1266 BLOCK DIAGRAM
(AM/FM IF Amp. Detector System)



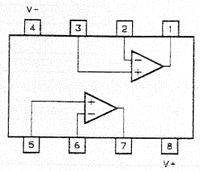
IC103 LM7001 BLOCK DIAGRAM
(Phase Lock Loop)



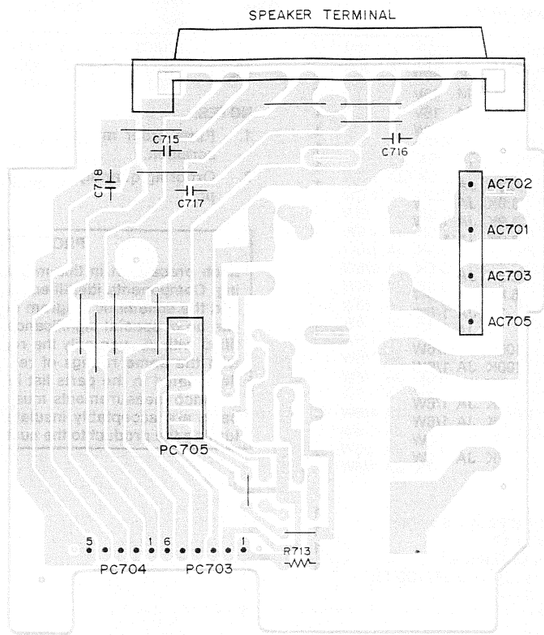
IC401 LA6458DS BLOCK DIAGRAM
(Dual Operational Amp.)



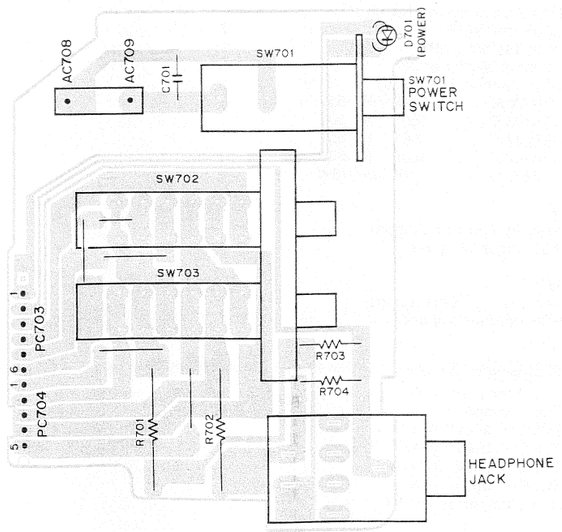
IC104 UPC4570C BLOCK DIAGRAM
(Dual Operational Amp.)



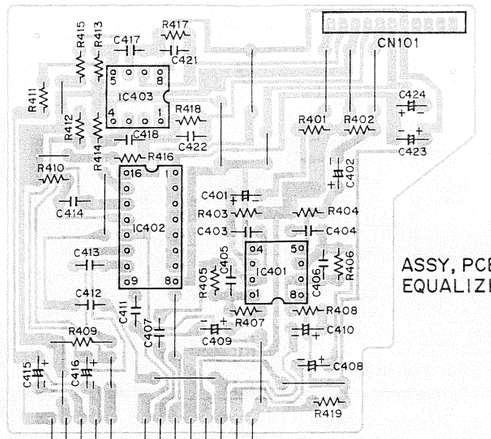
SPEAKER TERMINAL P.C.BOARD
(BOTTOM VIEW)



POWER SWITCH P.C.BOARD
(BOTTOM VIEW)



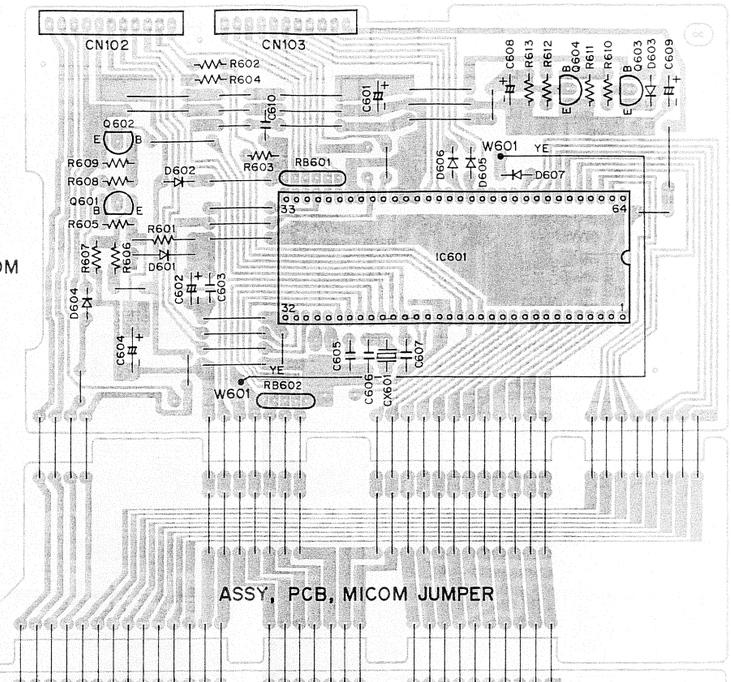
GRAPHIC EQ./MICOM/CONTROL PRINTED CIRCUIT BOARD
(BOTTOM VIEW)



ASSY, PCB, GRAPHIC EQUALIZER

ASSY, PCB, VOLUME JUMPER

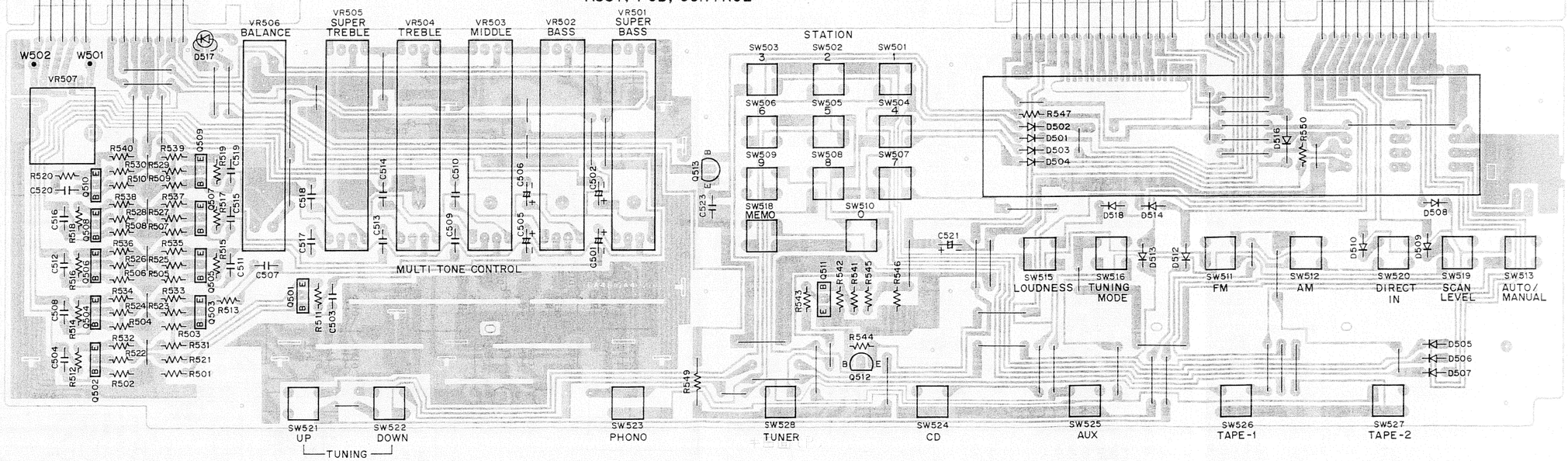
TRANSISTOR DC VOLTAGES				
Ref. No.	DEVICE	B	C	E
Q601	2SA608	4.8V	0V	2.1V
Q602	2SC536	0V	0V	0V
Q603	2SA608	5.6V	0V	5.6V
Q604	2SC536	0V	4.6V	0V



ASSY, PCB, MICOM

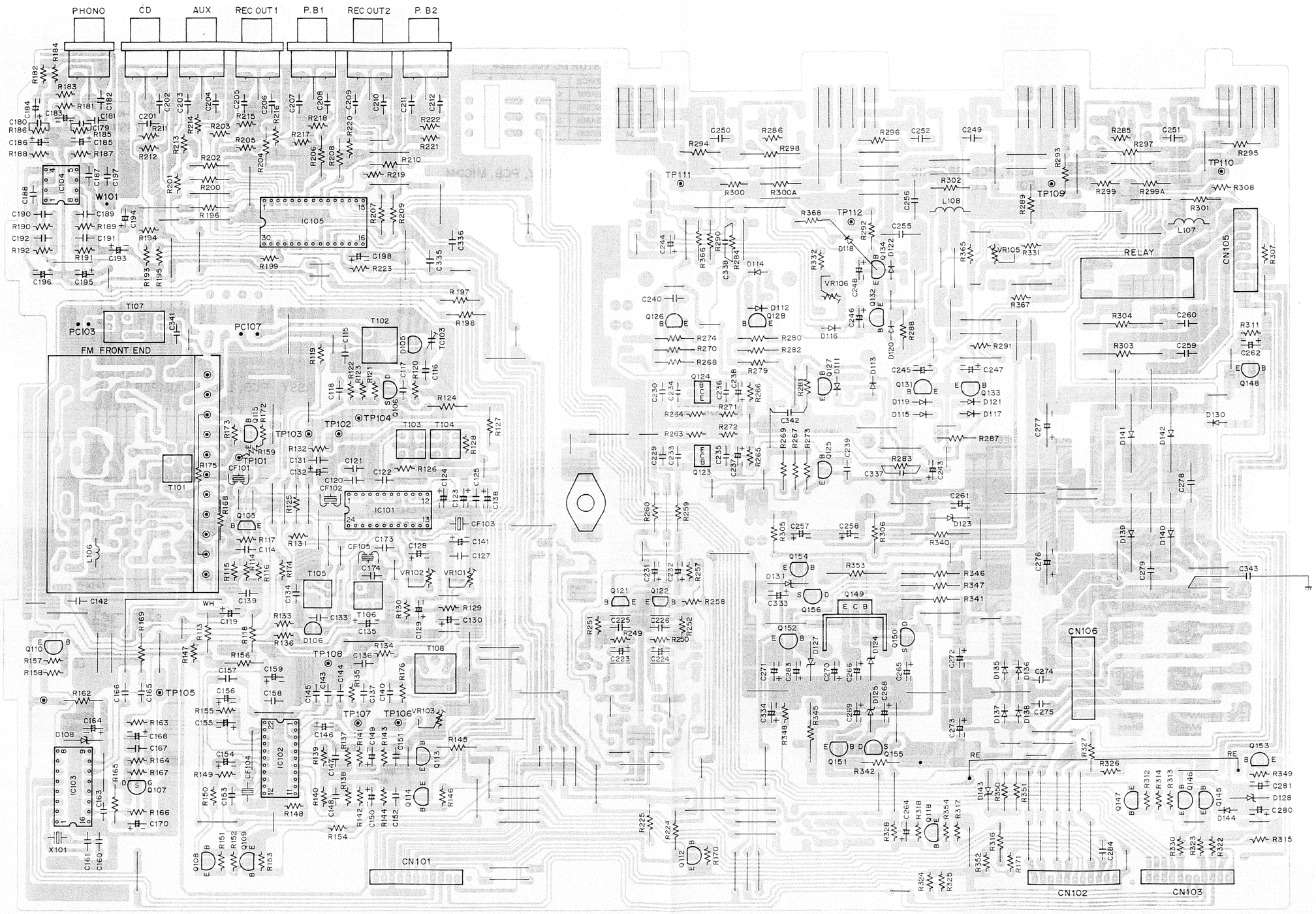
ASSY, PCB, MICOM JUMPER

ASSY, PCB, CONTROL

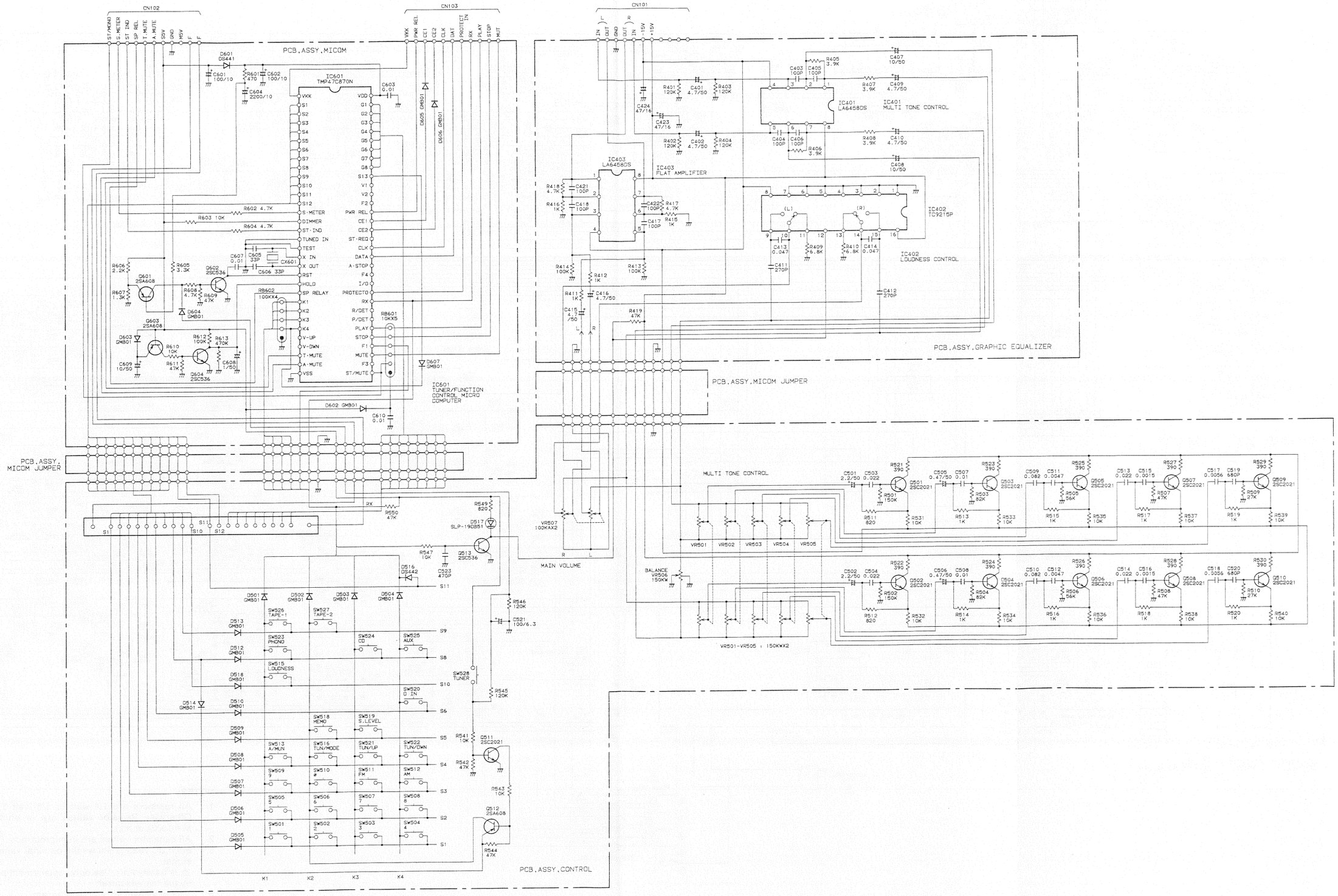


TRANSISTOR DC VOLTAGES									
Ref. No.	DEVICE	B	C	E	Ref. No.	DEVICE	B	C	E
Q501,502	2SC2021	0V	15.0V	0.6V	Q509,510	2SC2021	0V	15.0V	0.6V
Q503,504	2SC2021	0V	15.0V	0.6V	Q511	2SC2021	0V	0V	0V
Q505,506	2SC2021	0V	15.0V	0.6V	Q512	2SA608	4.3V	−0.1V	4.5V
Q507,508	2SC2021	0V	15.0V	0.6V	Q513	2SC536	0V	4.4V	0V

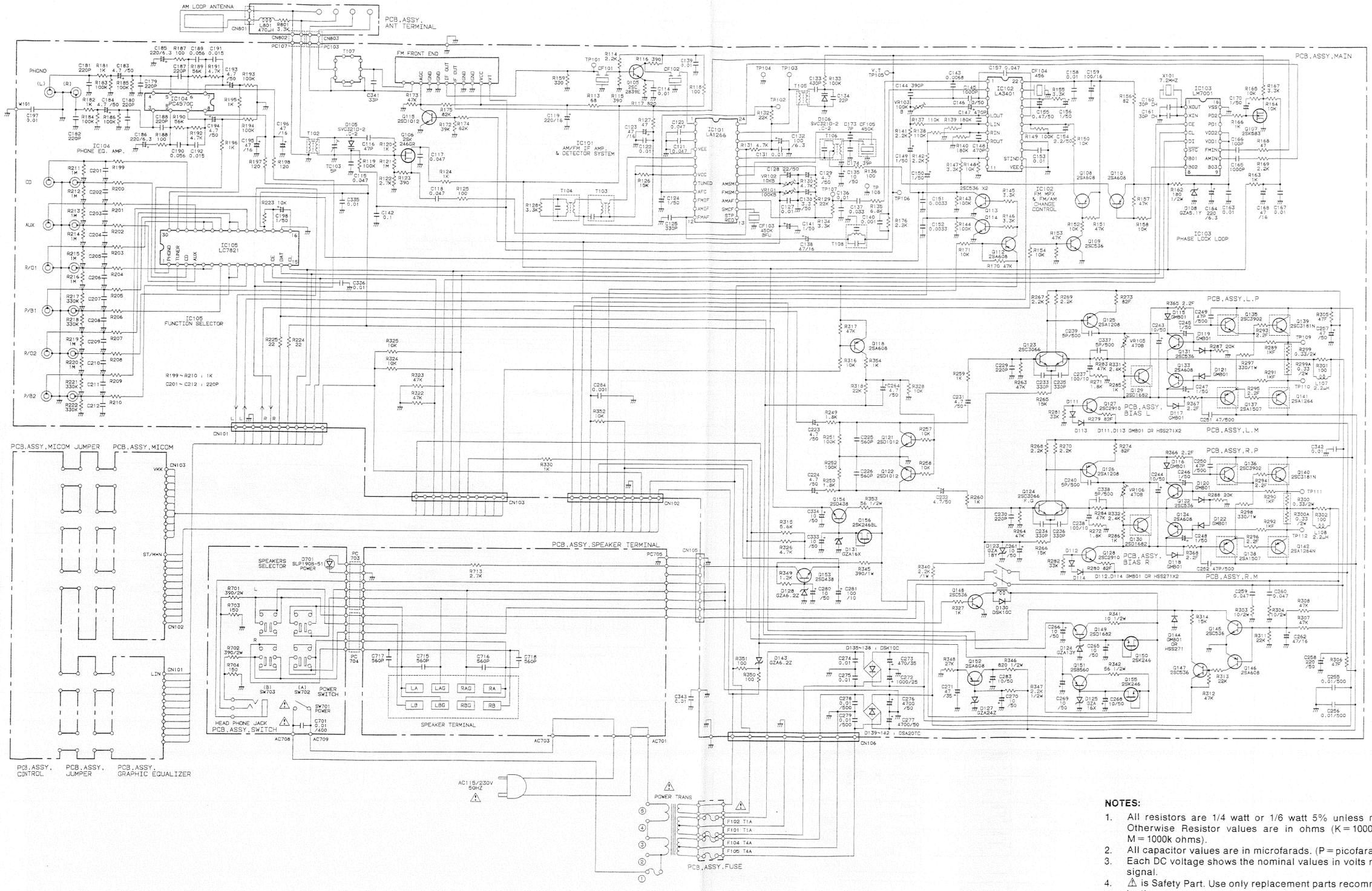
MAIN PRINTED CIRCUIT BOARD
(BOTTOM VIEW)



SCHEMATIC DIAGRAM (MICOM CONTROL P.C.BOARD Section)



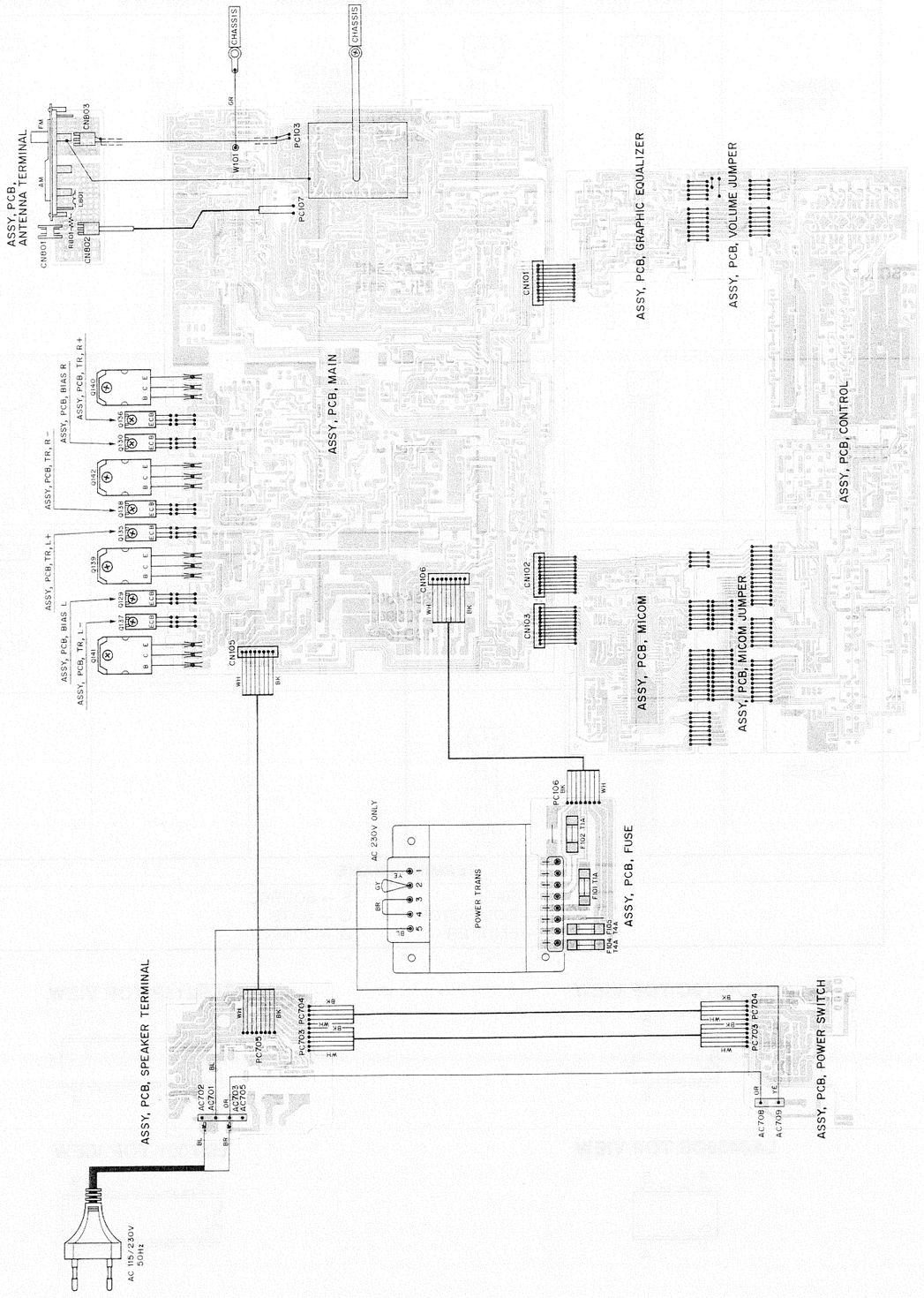
SCHEMATIC DIAGRAM (RF MAIN P.C.BOARD Section)



NOTES:

1. All resistors are 1/4 watt or 1/6 watt 5% unless marked. Otherwise Resistor values are in ohms (K = 1000 ohms, M = 1000k ohms).
2. All capacitor values are in microfarads. (P = picofarads).
3. Each DC voltage shows the nominal values in volts no input signal.
4. ⚠ is Safety Part. Use only replacement parts recommended by the manufacturer.
5. This is a basic schematic diagram.

POINT TO POINT WIRING DIAGRAM

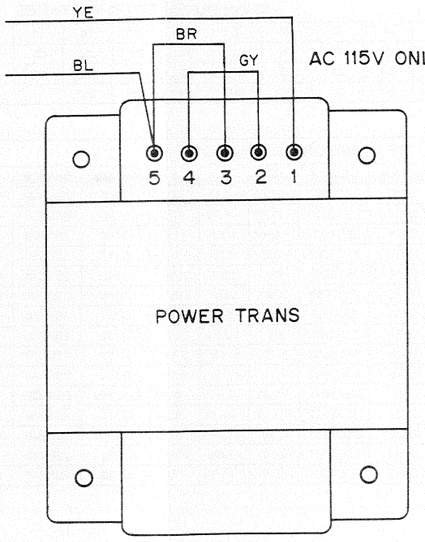


IMPORTANT NOTE

The AM/FM Stereo Receiver has been Factory-adjusted for operation on 230V AC. The voltage can be changed for operation on 115V AC by making the following changes on the AM/FM Stereo Receiver inside.

1. Remove the AC plug from the wall outlet.
2. Remove the screws securing the cover.
3. Disconnect Brown lead from Power Trans Terminal No. 4, and then connect it to Power Trans Terminal No. 5.
4. Disconnect one of the Gray leads from the Power Trans Terminal No. 2, and connect its lead to the Power Trans Terminal No. 4.

The AM/FM Stereo Receiver is now ready 115V operation. DO NOT attempt to operate the AM/FM Stereo Receiver on 230V.
Damage will result !



REFERENCE VOLTAGE TABLE OF IC & TRANSISTOR LEAD

MAIN P.C.BOARD

IC PIN NUMBERS DC VOLTAGES

Ref. No.	DEVICE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
IC101	LA1266	2.4V	2.4V	2.4V	0V	11.8V	11.7V	11.7V	0V	3.4V	2.3V	0V	3.2V	0V	1.4V	1.5V	0V	0V	2.4V	1.5V	0V
		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
		3.8V	3.9V	3.9V	3.0V	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

IC PIN NUMBERS DC VOLTAGES

Ref. No.	DEVICE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
IC102	LA3401	3.1V	3.1V	3.1V	3.1V	4.8V	3.1V	3.1V	4.9V	3.1V	0V	0V	0V	5.5V	4.9V	0V	2.8V	8.7V	5.0V	2.8V	7.0V
		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
		1.7V	11.2V	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

IC PIN NUMBERS DC VOLTAGES

Ref. No.	DEVICE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
IC103	LM7001	1.5V	1.5V	0V	0V	0V	0V	0V	11.6V	0.2V	0V	2.7V	5.2V	5.2V	0V	1.0V	0V
IC104	UPC4570C	0V	0V	0V	– 15.1V	0V	0V	0V	15.3V	–	–	–	–	–	–	–	–

IC PIN NUMBERS DC VOLTAGES

Ref. No.	DEVICE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
IC105	LC7821	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	– 15.7V	0V	0V	0V	0V	0V	15.9V	15.9V	0V
		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
		0V	0V	0V	0V	0V	0V	0V	0V	0V	0V	–	–	–	–	–	–	–	–	–	–

TRANSISTOR DC VOLTAGES

Ref. No.	DEVICE	B	C	E	Ref. No.	DEVICE	B	C	E	Ref. No.	DEVICE	B	C	E
Q105	2SC2839	1.8 V	11.8V	1.1V	Q127	2SC2910	– 39.6V	– 1.1V	– 40.2V	Q142	2SA1264	– 0.5V	– 41.6V	0V
Q108	2SA608	10.5V	11.2V	11.2V	Q128	2SC2910	– 39.6V	– 1.0V	– 40.2V	Q145	2SC536	0V	5.7V	0V
Q109	2SC536	0.6V	0V	0V	Q129	2SD1682	– 0.4V	1.1V	– 1.0V	Q146	2SA608	0V	– 15.6V	0V
Q110	2SA608	11.7V	0V	11.7V	Q130	2SD1682	– 0.5V	1.1V	– 1.0V	Q147	2SC536	– 15.7V	5.6V	– 15.7V
Q112	2SA608	5.6V	– 1.2V	5.7V	Q131	2SC536	0V	1.0V	0V	Q148	2SC536	0.7V	0V	0V
Q113	2SC536	– 1.2V	0V	0V	Q132	2SC536	0V	0.9V	0V	Q149	2SD1682	13.6V	20.9V	13.0V
Q114	2SC536	– 1.6V	0V	0V	Q133	2SA608	0V	– 0.9V	0V	Q151	2SB560	– 16.3V	– 22.4V	– 15.7V
Q115	2SD1012	0V	4.1V	0V	Q134	2SA608	0V	– 0.9V	0V	Q152	2SA608	– 26.2V	– 33.4V	– 26.8V
Q118	2SA608	5.6V	0V	5.7V	Q135	2SC3902	1.1V	41.9V	0.5V	Q153	2SD438	6.3V	12.6V	5.6V
Q121	2SD1012	– 4.9V	0V	0V	Q136	2SC3902	1.1V	41.8V	0.5V	Q154	2SD438	16.5V	20.7V	15.9V
Q122	2SD1012	– 4.9V	0V	0V	Q137	2SA1507	– 1.0V	– 41.5V	– 0.5V	Ref. No.	DEVICE	G	D	S
Q123	2SC3066	– 0.7V	39.7V	– 0.1V	Q138	2SA1507	– 1.1V	– 41.5V	– 0.5V	Q106	2SK246	2.9V	5.1V	11.4V
Q124	2SC3066	– 0.6V	39.6V	– 0.1V	Q139	2SC3181	0.5V	41.8V	0V	Q150	2SK246	13.6V	22.4V	13.6V
Q125	2SA1208	39.9V	1.1V	40.3V	Q140	2SC3181	0.5V	41.6V	0V	Q155	2SK246	– 24.2V	– 16.4V	– 24.2V
Q126	2SA1208	39.7V	1.1V	40.3V	Q141	2SC1264	– 0.5V	– 41.9V	0V	Q156	2SK246	16.5V	22.3V	16.6V

GRAPHIC EQ P.C.BOARD

IC PIN NUMBERS DC VOLTAGES

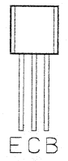
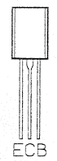
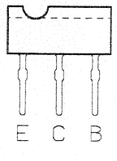
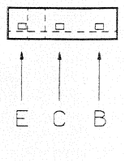
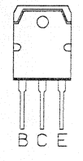
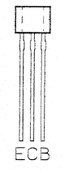
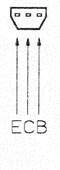
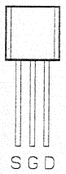
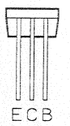
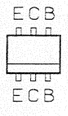
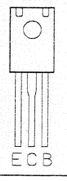
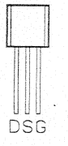
Ref. No.	DEVICE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
IC401	LA6458	0V	0V	0V	– 15.3V	0V	0V	0V	15.4V	–	–	–	–	–	–	–	–
IC402	TC9215P	0V	0V	0V	0V	0V	0V	0V	– 15.3V	0V	0V	0V	15.3V	0V	0V	0V	0V
IC403	LA6458	0V	0V	0V	– 15.3V	0V	0V	0V	15.4V	–	–	–	–	–	–	–	–

MICOM P.C.BOARD

IC PIN NUMBERS DC VOLTAGES

Ref. No.	DEVICE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
IC601	TMP47C870	– 26.2V	– 22.0V	– 18.6V	– 11.4V	– 15.2V	– 14.9V	– 18.2V	– 25.8V	– 14.9V	– 14.8V	– 15.2V	– 25.8V	– 25.8V	0V	5.1V	5.4V	0V	0V	2.2V	2.3V
		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
		4.7V	4.6V	1.5V	0V	0V	0V	0.5V	0V	0V	0V	5.6V	0V	3.0V	0V	4.6V	0V	5.3V	5.3V	0V	0V
		41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
		5.8V	0.4V	0.4V	0V	0V	0V	0V	2.1V	2.1V	2.1V	5.1V	2.0V	2.1V	2.1V	0.1V	2.0V	2.0V	2.0V	2.0V	2.2V
		61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
		2.2V	2.2V	5.1V	5.1V	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

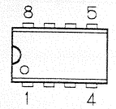
IC & TRANSISTOR LEAD IDENTIFICATION

TRANSISTOR	FRONT VIEW	BOTTOM VIEW	TRANSISTOR	FRONT VIEW	BOTTOM VIEW
2SA608 2SC536			2SA1208 2SB560 2SC2910 2SD438		
2SC2021			2SA1264N 2SC3181N		
2SC2839 2SD1012			2SK246		
2SC3066			2SA1507 2SC3902 2SD1682		
2SK583					

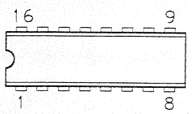
TERMINAL NAME

B → BASE	S → SOURCE
C → COLLECTOR	G → GATE
E → EMITTER	D → DRAIN

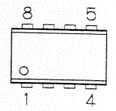
UPC4570C TOP VIEW



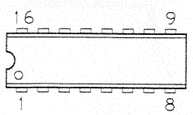
TC9215P TOP VIEW



LA6458DS TOP VIEW

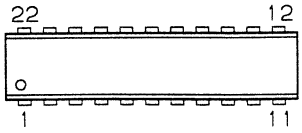


LM7001 TOP VIEW

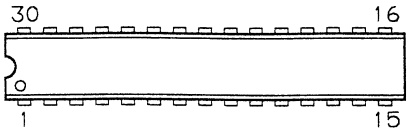


IC & TRANSISTOR LEAD IDENTIFICATION (Continued)

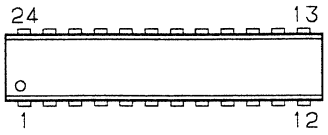
LA3401 TOP VIEW



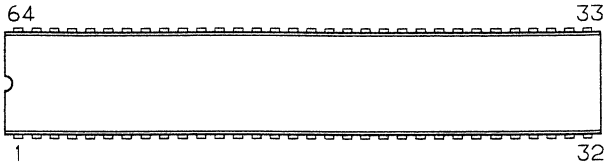
LC7821 TOP VIEW



LA1266 TOP VIEW



TMP47C870N-4664Z TOP VIEW



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Bitte geben Sie unbedingt die Ersatzteil-Nummer und die Modellbezeichnung an.
Sie sparen so wertvolle Zeit. Vielen Dank.

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